

EXHIBIT 13

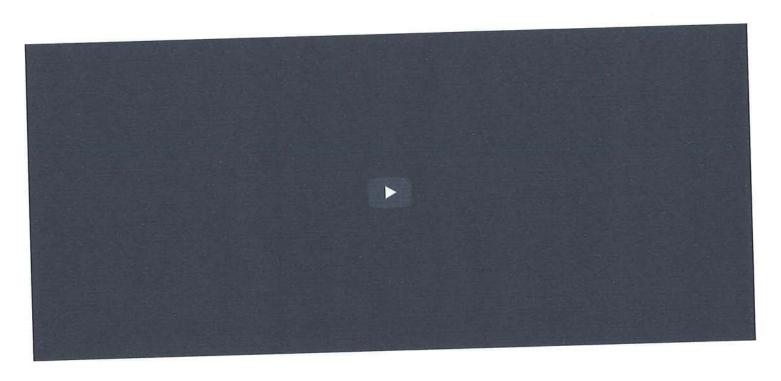
For Federal criminal case
-- BRIEF / MEMORANDUM IN SUPPORT OF
BRIAN DAVID HILL'S "MOTION UNDER 28
USC § 2255 TO VACATE, SET ASIDE, OR
CORRECT SENTENCE BY A PERSON IN
FEDERAL CUSTODY" - DECLARATION,
ATTACHED EXHIBITS, AND BRIEF IN
SUPPORT OF THIS MOTION -United States of America v. Brian David Hill
(Brian D. Hill) (formerly USWGO Alternative
News)

Criminal Case Number 1:13-cr-00435-1





False Confessions or Admissions



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Modern Missions Missi

Astonishingly, more than 1 out of 4 people wrongfully convicted but later exonerated by DNA evidence made a false confession or incriminating statement.

Why do innocent people confess?

The reasons that people falsely confess are complex and varied, but what they tend to have in common is a belief that complying with the police by saying that they committed the crime in question will be more beneficial than continuing to maintain their innocence.

The factors that can contribute to a false confession during a police interrogation include:

11/1/2017

- duress
- coercion
- intoxication
- diminished capacity
- mental impairment
- ignorance of the law
- fear of violence
- the actual infliction of harm
- the threat of a harsh sentence
- misunderstanding the situation

Confessions obtained from juveniles are often unreliable — children can be easy to manipulate and are not always fully aware of their situation.

People with mental disabilities have often falsely confessed because they are tempted to accommodate and agree with authority figures. Further, many law enforcement interrogators are not given any special training on questioning suspects with mental disabilities. An impaired mental state due to mental illness, drugs or alcohol may also elicit false admissions of guilt.

Mentally capable adults also give false confessions due to a variety of factors like the length of interrogation, exhaustion or a belief that they can be released after confessing and prove their innocence later.

From threats to torture

Sometimes law enforcement use harsh interrogation tactics with uncooperative suspects. But some police officers, convinced of a suspect's guilt, occasionally use tactics so persuasive that an innocent person feels compelled to confess. For instance, it is perfectly legal for law enforcement to employ deception or trickery in the interrogation room. Some suspects are untruthfully told that there is already evidence pointing to their guilt, such as a forensic test that links the suspect to the crime. Some suspects have confessed to avoid physical harm or discomfort. Others are told they will be convicted with or without a confession and that their sentence will be more lenient if they confess. Some are told a confession is the only way to avoid the death penalty. These tactics can be persuasive in eliciting a false confession.

Reforms and Solutions

Mandatory Recording of Interrogations

The electronic recording of interrogations, from beginning to end, is the single best reform available to prevent wrongful convictions caused by false confessions. This record will improve the credibility and reliability of authentic confessions, while protecting the rights of innocent suspects.

In some false confession cases, details of the crime are inadvertently communicated to a suspect by police during questioning. Later, when a suspect knows these details, the police take the knowledge as evidence of guilt. Often, threats or promises are made to the suspect off camera and then the camera is turned on, resulting in a false confession. Without an objective record of the entire custodial interrogation, it is difficult to gauge the reliability of the confession.

For law enforcement agencies, recording interrogations can prevent disputes about how a suspect was treated, create a clear record of a suspect's statements and increase public confidence in the criminal justice system. Recording interrogations can also deter officers from using illegal or devious tactics to secure a confession.

Proven Success

24 states, from North Carolina to Massachusetts to Illinois, require the recording of custodial interrogations through law or court action. More than a thousand additional law enforcement agencies voluntarily record interrogations. A 2004 study conducted by the Center on Wrongful Convictions of more than 200 locations that implemented this reform found that police departments overwhelmingly embrace the measure as good law enforcement practice whose time has come. Proactive policies like these have been adopted because the practice benefits police and prosecutors as well as innocent suspects.

RESOURCES

"Police-Induced Confessions: Risk Factors and Recommendations" by Saul Kassin, et al., Law and Human Behavior

(https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1483878)

"The Substance of False Confessions" by Brandon Garrett, Stanford Law Review

(http://www.stanfordlawreview.org/print/article/substance-false-confessions)

False Confessions: Transcripts and Testimony

A collection created by Brandon Garrett and housed on the University of Virginia School of Law website that includes transcripts and testimony from the trials of people who falsely confessed and were later exonerated by DNA testing.

(http://www.law.virginia.edu/html/librarysite/garrett_falseconfess.htm)

"Why Confessions Trump Innocence" by Saul Kassin, American Psychologist

(http://www.innocenceproject.org/wp-content/uploads/2016/05/Kassin-2012.pdf)

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Criminal Case Number 1:13-cr-00435-1



CASE SUPPLEMENTAL REPORT

NOT SUPERVISOR APPROVED

Printed: 12/16/2014 10:18

Mayodan Police Department

OCA: 201200287

THE INFORMATION BELOW IS CONFIDENTIAL - FOR USE BY AUTHORIZED PERSONNEL ONLY

Case Status: CLOSED/CLEARED

Case Mng Status: CLEARED BY ARREST BY

Occured: 08/22/2012

Offense: SECOND DEGREE SEXUAL EXPLOITATION OF A MINOR

Investigator: BRIM, C. T. (374)

Date / Time: 08/29/2012 11:23:00, Wednesday

Supervisor: BRIM, C. T. (374)

Supervisor Review Date / Time: NOT REVIEWED

Contact: Hill, Brian David

Reference: Suspect Recorded Statement

413 North 2nd Avenue, Mayodan

336-510-7972

Interview of Brian David Hill

Page 1

BH

- Q. What is your computer usage and knowledge?
- A. I download movies, programs and music.
- Q. What type of download software do you use?
- A. I use bit torrent programs, like eMule. I only download. I don't share.
- Q. Does your mom ever get on your computer?
- A. No.
- Q. Did you use any other computers to download files?
- A. Yes. But I use my black Toshiba the most.
- Q. What is your email password?
- A. admin@uswgo.com
- Q. How long have you been downloading and viewing child pornography?
- A. About a year or so.
- Q. Is there any other child pornography on any other computers?
- A. Yes. I have a Netbook at home that you didn't get.
- Q. What is you IRC user name and password?
- A. uswgo /
- Q. Do we have your permission to view your emails?
- A. Yes. [BH]

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[BH]

- Q. How many child images do you think you currently possess?
- A. 100+.
- Q. What type of files do you search for in your file sharing programs?
- A. PTHC and PTSC.
- Q. What does that stand for?
- A. Preteen Hardcore and Preteen Softcore.
- Q. Do you think child pornography is wrong?

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336-510-7972

A. Yes. I wanna stop.

Q. How often do you look at it?

A. Probably an hour a day.

Q. Do you masturbate to child pornography?

A. Yes.

Q. Do you think that you have a problem?

A. Yes. I need help.

Q. Are you attracted to adults or just children?

A. Both. But I prefer kids.

Q. What age range do you like?

A. 12 to 13.

Q. Did you take your laptop with child pornography to your grandparent's house in Virginia?

A. Yes. [BH]

Signed by: Brian Hill Witnessed by: CT Brim

Date: 08/29/2012 Time: 12:21 PM

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Interview and Interrogation of people with autism (including Asperger syndrome)

By Dennis Debbaudt

Conducting on-scene interviews of victims, witnesses, and suspects, a routine event for patrol officers, allows the officer to gather basic information such as who, what, where, when, and why.

The officer uses this information to assess situations and decide on further action.

An interrogation differs somewhat from basic fact-gathering since it tends to focus more on a subject who probably is suspected of a criminal act. Different techniques, rules, and procedures apply during an interrogation. A law enforcement professional may be trained in the techniques of interrogation, the rules that apply - such as when to advise suspects of their legal rights - and what procedures to use - such as the venue, environment, or comfort level of the suspect. An interrogation is conducted when there is reason to suspect that a person knows more about or was involved in committing a criminal act.

Whether it is a simple field interview, or a more focused interrogation, dealing with persons with autism presents unique challenges and considerations.

Misleading indications of guilt

There will be occasions when first-responders refer a case involving a person with autism for further questioning. In most cases this will involve an individual who apparently communicates very well and has achieved a high level of independence in the community. The person may have been found at or been identified by others as being at the scene or possessing knowledge of a crime.

Higher-functioning or more independent individuals with autism may live alone or without constant supervision, be able to drive or use public transportation, hold a job, and enjoy leisure activities. They may possess apparently normal verbal skills but be deficient in comprehension, social awareness, and decision-making. They may appear as quite normal at first, but the symptoms, behaviours, and characteristics - for example, providing blunt or tactless answers, changing the subject, or being unable to understand or accept a rational answer - will become apparent to the educated investigator. However, without an understanding of the disability it will be easy to misinterpret the information provided as an indicator of guilt.

They may provide no eye contact at all, even when a questioner shifts their position to obtain it. The person may have been taught to give eye contact but this may be perceived as insincere, glaring, or fixated. The interviewer may mistake this unusual eye contact as a tension-relieving technique used by a guilty person, when it is nothing more than a symptom of the condition of autism.

When stressed, communications skills may diminish or disappear. Answers may seem evasive or unconnected to the question that was asked. Individuals may appear belligerent, argumentative, stubborn, or inattentive - behaviour that may seem indicative of a person with something to hide. They can easily become the object of increased scrutiny by the questioner. What started as a routine fact-gathering task may turn into an unnecessary interrogation because an officer, unfamiliar with the behaviours of ASDs may have had their law enforcement instincts rightfully aroused.

Possible traps when interrogating a person with autism

Techniques used during interrogations may include the use of trickery and decelt:

'Without some elements of "trickery", such as leading the suspect to believe that the police have some tangible or specific evidence of guilt, many interrogations will be totally ineffective' (Inbau and Reid 1967, p.196).

'Only one important qualification has been attached to the rule; the trickery or deceit must not be of such nature as to induce a false confession' (Inbau and Reid 1967, p.195).

The higher-functioning person through his or her responses, and the unaware interrogator through

their beliefs, may become unwitting accomplices to continuing a faulty investigation in the best case or, in the worst case, to extracting a false confession.

The following are some possible traps that interrogators can fall into when conducting the interrogation of a person with autism.

Memory Skills

Interrogators should understand that the person with autism may have highly developed memory skills. The person may have learned to commit facts or the statements of others to memory: This rote skill may allow him or her to quickly assimilate and regurgitate data. The individual may be more proficient in his or her expression of these facts than in comprehension of them. He or she may have developed a sophisticated form of echolalia, echoing and repeating the words of others. For example, the person with autism could memorize the allegations of a citizen overheard at the scene, facts inadvertently provided by a first-responding officer, and details of some of the circumstantial evidence that an interrogator has revealed during questioning. Under these circumstances, the person with autism could provide a very convincing untrue statement or false confession. At the least, this knowledge could be misconstrued as real familiarity of facts that only a guilty person could know.

The Interrogator as Authority Figure

Persons with autism may have been conditioned through their lifetime to look to authority figures to make many of life's important decisions for them. They have learned to depend on and trust these authority figures to be right. The interrogator may be viewed as another authority figure that is always right. 'If he thinks I robbed the bank, maybe he's right' is a conclusion that the confused person with autism may develop during an interrogation.

Friendly-Unfriendly

Persons with autism may have a hard time developing friends. They may seek the friendship of others, only to be continually disappointed. They may repeat social gaffes that others find repelling, and they may learn little from these friend-seeking experiences. Although they may not have learned how to make a friend, this will not stop them from trying.

The interrogation techniques of friendly-unfriendly interrogators have the potential to produce false confession from such persons. 'The friendly-unfriendly act is particularly appropriate in the interrogation of a subject who is politely apathetic - the person who just nods his head as though in agreement with the interrogator, but says nothing in response except possibly a denial of guilt' (Inbau and Reid 1967, p.64). The person with autism may involuntarily give an interrogator the impression that he or she is apathetic, and may deny guilt because he or she is innocent.

The friendly interrogator may convince the trusting individual that they are, truly, their friend. The person with autism has now just made a new friend, and 'if my friend wants to know about me robbing a bank, then I'll tell him just to keep him around.' Rather than telling the truth, the person will tell his or her 'friend' what he or she thinks they want to hear.

Concrete Thinkers

Persons with autism are concrete thinkers. Jokes, sarcasm, innuendo, satire, trickery and deceit are difficult concepts for them to understand and appreciate. Their world is unadorned with pretext, pretence, sham, and dishonesty. They are naturally guileless and very honest. They are not very able liars. They expect others to be honest and they can become confused or disappointed when they are not. We have learned that persons with autism may not have a complete understanding of what is expected of them, or the consequences of their actions. They may not understand how serious the consequences of the confession will be for them. They may be led to believe that lying is what is expected of them.

Poor Liars

An interrogator may seek an admission of lying about any part of the alleged offence. The person with autism may try to respond to this new friend or authority figure with what he or she believes is the reply that is wanted. The person may truly have made a mistake; to the interrogator, it was a lie.

When asked if he or she has ever thought about committing the offence in question, the honestto-a-fault but innocent person with autism may answer 'Yes', as opposed to the characteristic answer of , No' from an innocent person. While both persons only thought in passing about committing such an offence, the 'normal' person would not consider answering yes. The concretethinking autistic person may answer the question as it is asked, causing the interrogator to continue the probe.

It is possible that the person with autism has learned through experience to lie. But her or his attempts to lie will be done poorly. An interrogator should ask a series of unrelated questions to determine the person's ability and potential for lying. This should be done prior to asking questions that are pertinent to the matter at hand.

Tips for the interviewer/interrogator

The interviewer must be specific in what information is sought by asking questions that avoid ambiguity. If the interviewer asks, 'Did you take the money?', the person with autism may say 'Yes' whether or not she or he actually took it. It would be clearer to ask, 'What did you do?' allowing for the individual to provide a response. If you ask, 'Were you with your family or John?' the autistic person may respond, 'John', because that was the last choice of the sequence. If the question was asked again but in reverse order, the autistic person may answer, 'My family,' for the same reason (Perske 1991).

A more specific question might be, 'Who were you with?' which reduces the influence of suggestion on the subject. Obtaining a false confession is a situation for which no conscientious law enforcement officer would want to be responsible.

Some other factors investigators may consider:

· Be sure the subject understands his or her legal rights.

Saying yes is not the same as understanding them. To the concrete thinker 'waiving your right' may mean waving your right hand.

To avoid confusion, ask questions that rely on narrative responses.

 Asking yes or no question is an essential and important element of determining guilt. But consider asking a series of yes or no questions to determine the style and dependability of the response. Then ask the key yes or no questions.

Seek the advice of a psychiatrist or psychologist who is familiar with autism. Consider contacting a specialist in autism from outside the criminal justice system.

Seek the advice of a prosecutor. You have a job to do and want to perform it in the best
way possible. With their unusual responses to your questions, the higher-functioning
person with autism may challenge all of your training.

Follow procedure, but also follow your gut instincts if you feel that something isn't 'quite
right' with the subject of your investigation. Like the old adage, if the statement or
confession is too good to be true, it probably is.

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BitTorrent

From Wikipedia, the free encyclopedia

BitTorrent is a communication protocol for peer-to-peer file sharing ("P2P") which is used to distribute data and electronic files over the Internet.

BitTorrent is one of the most common protocols for transferring large files, such as digital video files containing TV shows or video clips or digital audio files containing songs. Peer-to-peer networks have been estimated to collectively account for approximately 43% to 70% of all Internet traffic (depending on location) as of February 2009.^[1] In November 2004, BitTorrent was responsible for 25% of all Internet traffic.^[2] As of February 2013, BitTorrent was responsible for 3.35% of all worldwide bandwidth, more than half of the 6% of total bandwidth dedicated to file sharing.^[3]

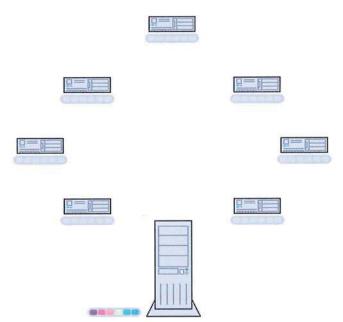
To send or receive files, a person uses a BitTorrent client on their Internet-connected computer. A BitTorrent client is a computer program that implements the BitTorrent protocol. Popular clients include μ Torrent, Xunlei, Transmission, qBittorrent, Vuze, Deluge, BitComet and Tixati. BitTorrent trackers provide a list of files available for transfer, and allow the client to find peer users known as *seeds* who may transfer the files.

Programmer Bram Cohen, a former University at Buffalo student,^[4] designed the protocol in April 2001 and released the first available version on 2 July 2001,^[5] and the most recent version in 2013.^[6] BitTorrent clients are available for a variety of computing platforms and operating systems including an official client released by BitTorrent, Inc.

As of 2013, BitTorrent has 15–27 million concurrent users at any time.^[7] As of January 2012, BitTorrent is utilized by 150 million active users. Based on this figure, the total number of monthly BitTorrent users may be estimated to more than a quarter of a billion.^[8]

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 - 5.2.1 Hash web seeding
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 - 5.2.3 Other
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Animation of protocol use: The colored dots beneath each computer in the animation represent different parts of the file being shared. By the time a copy to a destination computer of each of those parts completes, a copy to another destination computer of that part (or other parts) is already taking place between users. The tracker (server) provides only a single copy of the file, and all the users clone its parts from one another

- 5.4 Throttling and encryption
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Description

The BitTorrent protocol can be used to reduce the server and network impact of distributing large files. Rather than downloading a file from a single source server, the BitTorrent protocol allows users to join a "swarm" of hosts to upload to/download from each other simultaneously. The protocol is an alternative to the older single source, multiple mirror sources technique for distributing data, and can work effectively over networks with lower bandwidth. Using the BitTorrent protocol, several basic computers, such as home computers, can replace large servers while efficiently distributing files to many recipients. This lower bandwidth usage also helps prevent large spikes in internet traffic in a given area, keeping internet speeds higher for all users in general, regardless of whether or not they use the BitTorrent protocol. A user who wants to upload a file first creates a small torrent descriptor file that they distribute by conventional means (web, email, etc.). They then make the file itself available through a BitTorrent node acting as a seed. Those with the torrent descriptor file can give it to their own BitTorrent nodes, which—acting as peers or leechers—download it by connecting to the seed and/or other peers (see diagram on the right).



The middle computer is acting as a "seed" to provide a file to the other computers which act as peers.

The file being distributed is divided into segments called *pieces*. As each peer receives a new piece of the file, it becomes a source (of that piece) for other peers, relieving the original seed from having to send that piece to every computer or user wishing a copy. With BitTorrent, the task of distributing the file is shared by those who want it; it is entirely possible for the seed to send only a single copy of the file itself and eventually distribute to an unlimited number of peers. Each piece is protected by a cryptographic hash contained in the torrent descriptor. ^[6] This ensures that any modification of the piece can be reliably detected, and thus prevents both accidental and malicious modifications of any of the pieces received at other nodes. If a node starts with an authentic copy of the torrent descriptor, it can verify the authenticity of the entire file it receives.

Pieces are typically downloaded non-sequentially and are rearranged into the correct order by the BitTorrent client, which monitors which pieces it needs, and which pieces it has and can upload to other peers. Pieces are of the same size throughout a single download (for example a 10 MB file may be transmitted as ten 1 MB pieces or as forty 256 KB pieces). Due to the nature of this approach, the download of any file can be halted at any time and be resumed at a later date, without the loss of previously downloaded information, which in turn makes BitTorrent particularly useful in the transfer of larger files. This also enables the client to seek out readily available pieces and download them immediately, rather than halting the download and waiting for the

next (and possibly unavailable) piece in line, which typically reduces the overall time of the download. Once a peer has downloaded a file completely, it becomes an additional seed. This eventual transition from peers to seeders determines the overall "health" of the file (as determined by the number of times a file is available in its complete form).

The distributed nature of BitTorrent can lead to a flood-like spreading of a file throughout many peer computer nodes. As more peers join the swarm, the likelihood of a completely successful download by any particular node increases. Relative to traditional Internet distribution schemes, this permits a significant reduction in the original distributor's hardware and bandwidth resource costs. Distributed downloading protocols in general provide redundancy against system problems, reduce dependence on the original distributor^[9] and provide sources for the file which are generally transient and therefore harder to trace by those who would block distribution compared to the situation provided by limiting availability of the file to a fixed host machine (or even several).

One such example of BitTorrent being used to reduce the distribution cost of file transmission is in the BOINC client-server system. If a BOINC distributed computing application needs to be updated (or merely sent to a user), it can do so with little impact on the BOINC server.^[10]

Operation

A BitTorrent client is any program that implements the BitTorrent protocol. Each client is capable of preparing, requesting, and transmitting any type of computer file over a network, using the protocol. A peer is any computer running an instance of a client. To share a file or group of files, a peer first creates a small file called a "torrent" (e.g. MyFile.torrent). This file contains metadata about the files to be shared and about the tracker, the computer that coordinates the file distribution. Peers that want to download the file must first obtain a torrent file for it and connect to the specified tracker, which tells them from which other peers to download the pieces of the file.

Though both ultimately transfer files over a network, a BitTorrent download differs from a classic download (as is typical with an HTTP or FTP request, for example) in several fundamental ways:

- BitTorrent makes many small data requests over different IP connections to different machines, while classic downloading is typically made via a single TCP connection to a single machine.
- BitTorrent downloads in a random or in a "rarest-first"^[11] approach that ensures high availability, while classic downloads are sequential.

Taken together, these differences allow BitTorrent to achieve much lower cost to the content provider, much higher redundancy, and much greater resistance to abuse or to "flash crowds" than regular server software. However, this protection, theoretically, comes at a cost: downloads can take time to rise to full speed because it may take time for enough peer connections to be established, and it may take time for a node to receive sufficient data to become an effective uploader. This contrasts with regular downloads (such as from an HTTP server, for example) that, while more vulnerable to overload and abuse, rise to full speed very quickly and maintain this speed throughout. In general, BitTorrent's non-contiguous download methods have prevented it from supporting progressive download or "streaming playback". However, comments made by Bram Cohen in January 2007^[12] suggest that streaming torrent downloads will soon be commonplace and ad supported streaming^[13] appears to be the result of those comments. In January 2011 Cohen demonstrated an early version of BitTorrent streaming, saying the feature was projected to be available by summer 2011. As of 2013, this new BitTorrent streaming protocol is available for beta testing.

Creating and publishing torrents

The peer distributing a data file treats the file as a number of identically sized pieces, usually with byte sizes of a power of 2, and typically between 32 kB and 16 MB each. The peer creates a hash for each piece, using the SHA-1 hash function, and records it in the torrent file. Pieces with sizes greater than 512 kB will reduce the

size of a torrent file for a very large payload, but is claimed to reduce the efficiency of the protocol.^[16] When another peer later receives a particular piece, the hash of the piece is compared to the recorded hash to test that the piece is error-free.^[6] Peers that provide a complete file are called seeders, and the peer providing the initial copy is called the initial seeder. The exact information contained in the torrent file depends on the version of the BitTorrent protocol. By convention, the name of a torrent file has the suffix .torrent. Torrent files have an "announce" section, which specifies the URL of the tracker, and an "info" section, containing (suggested) names for the files, their lengths, the piece length used, and a SHA-1 hash code for each piece, all of which are used by clients to verify the integrity of the data they receive. Though SHA-1 has shown signs of cryptographic weakness, Bram Cohen does not consider the risk big enough for a backward incompatible change to for example SHA-3.^[17]

Torrent files are typically published on websites or elsewhere, and registered with at least one tracker. The tracker maintains lists of the clients currently participating in the torrent. Alternatively, in a *trackerless system* (decentralized tracking) every peer acts as a tracker. Azureus was the first BitTorrent client to implement such a system through the distributed hash table (DHT) method. An alternative and incompatible DHT system, known as Mainline DHT, was released in the Mainline BitTorrent client three weeks later (though it had been in development since 2002) and subsequently adopted by the μ Torrent, Transmission, rTorrent, KTorrent, BitComet, and Deluge clients.

After the DHT was adopted, a "private" flag — analogous to the broadcast flag — was unofficially introduced, telling clients to restrict the use of decentralized tracking regardless of the user's desires. [19] The flag is intentionally placed in the info section of the torrent so that it cannot be disabled or removed without changing the identity of the torrent. The purpose of the flag is to prevent torrents from being shared with clients that do not have access to the tracker. The flag was requested for inclusion in the official specification in August 2008, but has not been accepted yet. [20] Clients that have ignored the private flag were banned by many trackers, discouraging the practice. [21]

Downloading torrents and sharing files

Users find a torrent of interest, by browsing the web or by other means, download it, and open it with a BitTorrent client. The client connects to the tracker(s) specified in the torrent file, from which it receives a list of peers currently transferring pieces of the file(s) specified in the torrent. The client connects to those peers to obtain the various pieces. If the swarm contains only the initial seeder, the client connects directly to it and begins to request pieces. Clients incorporate mechanisms to optimize their download and upload rates; for example they download pieces in a random order to increase the opportunity to exchange data, which is only possible if two peers have different pieces of the file.

The effectiveness of this data exchange depends largely on the policies that clients use to determine to whom to send data. Clients may prefer to send data to peers that send data back to them (a "tit for tat" exchange scheme), which encourages fair trading. But strict policies often result in suboptimal situations, such as when newly joined peers are unable to receive any data because they don't have any pieces yet to trade themselves or when two peers with a good connection between them do not exchange data simply because neither of them takes the initiative. To counter these effects, the official BitTorrent client program uses a mechanism called "optimistic unchoking", whereby the client reserves a portion of its available bandwidth for sending pieces to random peers (not necessarily known good partners, so called preferred peers) in hopes of discovering even better partners and to ensure that newcomers get a chance to join the swarm.^[22]

Although "swarming" scales well to tolerate "flash crowds" for popular content, it is less useful for unpopular or niche market content. Peers arriving after the initial rush might find the content unavailable and need to wait for the arrival of a "seed" in order to complete their downloads. The seed arrival, in turn, may take long to happen (this is termed the "seeder promotion problem"). Since maintaining seeds for unpopular content entails high bandwidth and administrative costs, this runs counter to the goals of publishers that value BitTorrent as a cheap alternative to a client-server approach. This occurs on a huge scale; measurements have shown that 38% of all new torrents become unavailable within the first month. [23] A strategy adopted by many publishers which

significantly increases availability of unpopular content consists of bundling multiple files in a single swarm.^[24] More sophisticated solutions have also been proposed; generally, these use cross-torrent mechanisms through which multiple torrents can cooperate to better share content.^[25]

Concerns

BitTorrent does not, on its own, offer its users anonymity nor security. It is possible to obtain the IP addresses of all current and possibly previous participants in a swarm from the tracker. This may expose users with insecure systems to attacks. [22] It may also, in rare cases, expose users to the risk of being sued, if they are distributing files without permission from the copyright holder(s). However, there are ways to promote anonymity; for example, the OneSwarm project layers privacy-preserving sharing mechanisms on top of the original BitTorrent protocol. A moderate degree of anonymity, enough to keep ISPs from giving the user trouble at least, can be achieved with seedboxes such as Bitport, [26] put.io, [27] or Seedr, [28] which download the torrent files first to the companies' servers, followed by a direct download to the user. [29][30] Torrents can be downloaded with a high degree of anonymity by using services such as i2p. Tor does not provide anonymity on BitTorrent, [31] and its use is also discouraged (by blocking this type of connections) for performance reasons. [32] Unlike Tor, i2p is designed to work with BitTorrent [33] However, with i2p, torrents can only be downloaded from within the i2p network. This can be useful for users trying to avoid copyright complaints from their ISPs, maintaining privacy, or avoiding censorship.

Private trackers offer users a greater degree of privacy, compared to public trackers, but have the downside of a single centralized point of failure.

Bridging between i2p and the clearnet

Vuze is the only client that makes clearnet torrents available on i2p and vice versa. It has a plugin that connects to the i2p network. If the user adds a torrent from i2p, it will be seeded on both i2p and the clearnet, and if a user adds a torrent from the clearnet, it will be seeded on both the clearnet and i2p. For this reason, torrents previously published only on i2p are made available to the entire Internet, and users of i2p can download any torrent on the Internet while maintaining the anonymity of i2p.[34][35]

Adoption

A growing number of individuals and organizations are using BitTorrent to distribute their own or licensed works (e.g. indie bands distributing digital files of their new songs). Independent adopters report that without using BitTorrent technology, and its dramatically reduced demands on their private networking hardware and bandwidth, they could not afford to distribute their files.^[36]

Some uses of BitTorrent for file sharing may violate laws in some jurisdictions (see legal issues section).

Film, video, and music

- BitTorrent Inc. has obtained a number of licenses from Hollywood studios for distributing popular content from their websites.
- Sub Pop Records releases tracks and videos via BitTorrent Inc.^[37] to distribute its 1000+ albums. Babyshambles and The Libertines (both bands associated with Pete Doherty) have extensively used torrents to distribute hundreds of demos and live videos. US industrial rock band Nine Inch Nails frequently distributes albums via BitTorrent.
- Podcasting software is starting to integrate BitTorrent to help podcasters deal with the download demands of their MP3 "radio" programs. Specifically, Juice and Miro (formerly known as Democracy Player) support automatic processing of .torrent files from RSS feeds. Similarly, some BitTorrent clients, such as μTorrent, are able to process web feeds and automatically download content found within them.
- DGM Live purchases are provided via BitTorrent.^[38]
- VODO, a service which distributes "free-to-share" movies and TV shows via BitTorrent. [39][40][41]

Broadcasters

- In 2008, the CBC became the first public broadcaster in North America to make a full show (Canada's Next Great Prime Minister) available for download using BitTorrent.[42]
- The Norwegian Broadcasting Corporation (NRK) has since March 2008 experimented with bittorrent distribution, available online. [43] Only selected works in which NRK owns all royalties are published. Responses have been very positive, and NRK is planning to offer more content.
- The Dutch VPRO broadcasting organization released four documentaries in 2009 and 2010 under a Creative Commons license using the content distribution feature of the Mininova tracker. [44][45][46]

Personal works

- The Amazon S3 "Simple Storage Service" is a scalable Internet-based storage service with a simple web service interface, equipped with built-in BitTorrent support.^[47]
- Blog Torrent offers a simplified BitTorrent tracker to enable bloggers and non-technical users to host a tracker on their site. Blog Torrent also allows visitors to download a "stub" loader, which acts as a BitTorrent client to download the desired file, allowing users without BitTorrent software to use the protocol. [48] This is similar to the concept of a self-extracting archive.

Software

- Blizzard Entertainment uses BitTorrent (via a proprietary client called the "Blizzard Downloader", associated with the Blizzard "BattleNet" network) to distribute content and patches for Diablo III, StarCraft II and World of Warcraft, including the games themselves. [49]
- Wargaming uses BitTorrent in their popular titles World of Tanks, World of Warships and World of Warplanes to distribute game updates.^[50]
- CCP Games, maker of the space Simulation MMORPG Eve Online, has announced that a new launcher will be released that is based on BitTorrent.^{[51][52]}
- Many software games, especially those whose large size makes them difficult to host due to bandwidth limits, extremely frequent downloads, and unpredictable changes in network traffic, will distribute instead a specialized, stripped down bittorrent client with enough functionality to download the game from the other running clients and the primary server (which is maintained in case not enough peers are available).
- Many major open source and free software projects encourage BitTorrent as well as conventional downloads of their products (via HTTP, FTP etc.) to increase availability and to reduce load on their own servers, especially when dealing with larger files.^[53]

Government

 The UK government used BitTorrent to distribute details about how the tax money of UK citizens was spent. [54][55]

Education

- Florida State University uses BitTorrent to distribute large scientific data sets to its researchers. [56]
- Many universities that have BOINC distributed computing projects have used the BitTorrent functionality of the client-server system to reduce the bandwidth costs of distributing the client-side applications used to process the scientific data.
- The developing Human Connectome Project uses BitTorrent to share their open dataset

Others

- Facebook uses BitTorrent to distribute updates to Facebook servers.
- Twitter uses BitTorrent to distribute updates to Twitter servers. [58][59]

 The Internet Archive added BitTorrent to its file download options for over 1.3 million existing files, and all newly uploaded files, in August 2012.^{[60][61]} This method is the fastest means of downloading media from the Archive.^{[60][62]}

As of 2011, BitTorrent had 100 million users and a greater share of network bandwidth than Netflix and Hulu combined.^{[63][64]} In early 2015, AT&T estimates that BitTorrent represents 20% of all broadband traffic.^[65]

Routers that use network address translation (NAT) must maintain tables of source and destination IP addresses and ports. Typical home routers are limited to about 2000 table entries while some more expensive routers have larger table capacities. BitTorrent frequently contacts 20–30 servers per second, rapidly filling the NAT tables. This is a known cause of some home routers ceasing to work correctly. [66][67]

Indexing

The BitTorrent protocol provides no way to index torrent files. As a result, a comparatively small number of websites have hosted a large majority of torrents, many linking to copyrighted works without the authorization of copyright holders, rendering those sites especially vulnerable to lawsuits. A BitTorrent index is a "list of torrent files, which typically includes descriptions" and information about the torrent's content. Several types of websites support the discovery and distribution of data on the BitTorrent network. Public torrent-hosting sites such as The Pirate Bay allow users to search and download from their collection of torrent files. Users can typically also upload torrent files for content they wish to distribute. Often, these sites also run BitTorrent trackers for their hosted torrent files, but these two functions are not mutually dependent: a torrent file could be hosted on one site and tracked by another unrelated site. Private host/tracker sites operate like public ones except that they may restrict access to registered users and may also keep track of the amount of data each user uploads and downloads, in an attempt to reduce "leeching".

Web search engines allow the discovery of torrent files that are hosted and tracked on other sites; examples include Mininova, BTDigg, BTJunkie, Torrentz, Torrentus, The Pirate Bay and isoHunt. These sites allow the user to ask for content meeting specific criteria (such as containing a given word or phrase) and retrieve a list of links to torrent files matching those criteria. This list can often be sorted with respect to several criteria, relevance (seeders-leechers ratio) being one of the most popular and useful (due to the way the protocol behaves, the download bandwidth achievable is very sensitive to this value). Bram Cohen launched a BitTorrent search engine on www.bittorrent.com/search that co-mingles licensed content with search results.^[70] Metasearch engines allow one to search several BitTorrent indices and search engines at once. DHT search engines monitors the DHT network and indexes torrents via metadata exchange from peers. In the 2010s, some P2P, decentralized alternatives to Torrent search engines have emerged, see decentralized keyword search below.

Technologies built on BitTorrent

The BitTorrent protocol is still under development and may therefore still acquire new features and other enhancements such as improved efficiency.

Distributed trackers

On 2 May 2005, Azureus 2.3.0.0 (now known as Vuze) was released,^[71] introducing support for "trackerless" torrents through a system called the "distributed database." This system is a Distributed hash table implementation which allows the client to use torrents that do not have a working BitTorrent tracker. The following month, BitTorrent, Inc. released version 4.2.0 of the Mainline BitTorrent client, which supported an alternative DHT implementation (popularly known as "Mainline DHT", outlined in a draft on their website) that is incompatible with that of Azureus. Recent measurement shows users of Mainline DHT is from 10 million to 25 million, with a daily churn of at least 10 million.^[72] Mainline DHT is arguably the largest realistic DHT in the world.

Current versions of the official BitTorrent client, μ Torrent, BitComet, Transmission and BitSpirit all share compatibility with Mainline DHT. Both DHT implementations are based on Kademlia. As of version 3.0.5.0, Azureus also supports Mainline DHT in addition to its own distributed database through use of an optional application plugin. This potentially allows the Azureus/Vuze client to reach a bigger swarm.

Another idea that has surfaced in Vuze is that of *virtual torrents*. This idea is based on the distributed tracker approach and is used to describe some web resource. Currently, it is used for instant messaging. It is implemented using a special messaging protocol and requires an appropriate plugin. Anatomic P2P is another approach, which uses a decentralized network of nodes that route traffic to dynamic trackers. Most BitTorrent clients also use Peer exchange (PEX) to gather peers in addition to trackers and DHT. Peer exchange checks with known peers to see if they know of any other peers. With the 3.0.5.0 release of Vuze, all major BitTorrent clients now have compatible peer exchange.

Web seeding

Web "seeding" was implemented in 2006 as the ability of BitTorrent clients to download torrent pieces from an HTTP source in addition to the "swarm". The advantage of this feature is that a website may distribute a torrent for a particular file or batch of files and make those files available for download from that same web server; this can simplify long-term seeding and load balancing through the use of existing, cheap, web hosting setups. In theory, this would make using BitTorrent almost as easy for a web publisher as creating a direct HTTP download. In addition, it would allow the "web seed" to be disabled if the swarm becomes too popular while still allowing the file to be readily available. This feature has two distinct specifications, both of which are supported by Libtorrent and the 26+ clients that use it.

Hash web seeding

The first was created by John "TheSHADOW" Hoffman, who created BitTornado. [75][76] This first specification requires running a web service that serves content by info-hash and piece number, rather than filename.

HTTP web seeding

The other specification is created by GetRight authors and can rely on a basic HTTP download space (using byte serving).^{[77][78]}

Other

In September 2010, a new service named Burnbit was launched which generates a torrent from any URL using webseeding.^[79] There are server-side solutions that provide initial seeding of the file from the webserver via standard BitTorrent protocol and when the number of external seeders reach a limit, they stop serving the file from the original source.^[80]

RSS feeds

A technique called broadcatching combines RSS feeds with the BitTorrent protocol to create a content delivery system, further simplifying and automating content distribution. Steve Gillmor explained the concept in a column for Ziff-Davis in December 2003.^[81] The discussion spread quickly among bloggers (Ernest Miller, Chris Pirillo, etc.). In an article entitled *Broadcatching with BitTorrent*, Scott Raymond explained:

I want RSS feeds of BitTorrent files. A script would periodically check the feed for new items, and use them to start the download. Then, I could find a trusted publisher of an Alias RSS feed, and "subscribe" to all new episodes of the show, which would then start downloading automatically — like the "season pass" feature of the TiVo.

The RSS feed will track the content, while BitTorrent ensures content integrity with cryptographic hashing of all data, so feed subscribers will receive uncorrupted content. One of the first and popular software clients (free and open source) for *broadcatching* is Miro. Other free software clients such as PenguinTV and KatchTV are also now supporting broadcatching. The BitTorrent web-service MoveDigital added the ability to make torrents available to any web application capable of parsing XML through its standard REST-based interface in 2006,^[84] though this has since been discontinued. Additionally, Torrenthut is developing a similar torrent API that will provide the same features, and help bring the torrent community to Web 2.0 standards. Alongside this release is a first PHP application built using the API called PEP, which will parse any Really Simple Syndication (RSS 2.0) feed and automatically create and seed a torrent for each enclosure found in that feed.^[85]

Throttling and encryption

Since BitTorrent makes up a large proportion of total traffic, some ISPs have chosen to "throttle" (slow down) BitTorrent transfers. For this reason, methods have been developed to disguise BitTorrent traffic in an attempt to thwart these efforts. [86] Protocol header encrypt (PHE) and Message stream encryption/Protocol encryption (MSE/PE) are features of some BitTorrent clients that attempt to make BitTorrent hard to detect and throttle. As of November 2015, Vuze, Bitcomet, KTorrent, Transmission, Deluge, µTorrent, MooPolice, Halite, qBittorrent, rTorrent, and the latest official BitTorrent client (v6) support MSE/PE encryption. In September 2006 it was reported that some software could detect and throttle BitTorrent traffic masquerading as HTTP traffic. [87]

Reports in August 2007 indicated that Comcast was preventing BitTorrent seeding by monitoring and interfering with the communication between peers. Protection against these efforts is provided by proxying the client-tracker traffic via an encrypted tunnel to a point outside of the Comcast network. Comcast has more recently called a "truce" with BitTorrent, Inc. with the intention of shaping traffic in a protocol-agnostic manner. Questions about the ethics and legality of Comcast's behavior have led to renewed debate about net neutrality in the United States. In general, although encryption can make it difficult to determine what is being shared, BitTorrent is vulnerable to traffic analysis. Thus, even with MSE/PE, it may be possible for an ISP to recognize BitTorrent and also to determine that a system is no longer downloading but only uploading data, and terminate its connection by injecting TCP RST (reset flag) packets.

Multitracker

Another unofficial feature is an extension to the BitTorrent metadata format proposed by John Hoffman^[91] and implemented by several indexing websites. It allows the use of multiple trackers per file, so if one tracker fails, others can continue to support file transfer. It is implemented in several clients, such as BitComet, BitTornado, BitTorrent, KTorrent, Transmission, Deluge, μ Torrent, rtorrent, Vuze, and Frostwire. Trackers are placed in groups, or tiers, with a tracker randomly chosen from the top tier and tried, moving to the next tier if all the trackers in the top tier fail.

Torrents with multiple trackers can decrease the time it takes to download a file, but also have a few consequences:

- Poorly implemented^[92] clients may contact multiple trackers, leading to more overhead-traffic.
- Torrents from closed trackers suddenly become downloadable by non-members, as they can connect to a seed via an open tracker.

Decentralized keyword sear ch

Even with distributed trackers, a third party is still required to find a specific torrent. This is usually done in the form of a hyperlink from the website of the content owner or through indexing websites like isoHunt, Torrentz, BTDigg, Torrentus or The Pirate Bay. The Tribler BitTorrent client is the first to incorporate decentralized search capabilities.

With Tribler, users can find .torrent files that are hosted among other peers, instead of on a centralized index sites. It adds such an ability to the BitTorrent protocol using a gossip protocol, somewhat similar to the eXeem network which was shut down in 2005. The software includes the ability to recommend content as well. After a dozen downloads the Tribler software can roughly estimate the download taste of the user and recommend additional content. [93]

In May 2007 Cornell University published a paper proposing a new approach to searching a peer-to-peer network for inexact strings, [94] which could replace the functionality of a central indexing site. A year later, the same team implemented the system as a plugin for Vuze called Cubit [95] and published a follow-up paper reporting its success. [96]

A somewhat similar facility but with a slightly different approach is provided by the BitComet client through its "Torrent Exchange" [97] feature. Whenever two peers using BitComet (with Torrent Exchange enabled) connect to each other they exchange lists of all the torrents (name and info-hash) they have in the Torrent Share storage (torrent files which were previously downloaded and for which the user chose to enable sharing by Torrent Exchange). Thus each client builds up a list of all the torrents shared by the peers it connected to in the current session (or it can even maintain the list between sessions if instructed). At any time the user can search into that Torrent Collection list for a certain torrent and sort the list by categories. When the user chooses to download a torrent from that list, the .torrent file is automatically searched for (by info-hash value) in the DHT Network and when found it is downloaded by the querying client which can after that create and initiate a downloading task.

Implementations

The BitTorrent specification is free to use and many clients are open source, so BitTorrent clients have been created for all common operating systems using a variety of programming languages. The official BitTorrent client, µTorrent, qBittorrent, Transmission, Vuze, and BitComet are some of the most popular clients. [98][99][100][101]

Some BitTorrent implementations such as MLDonkey and Torrentflux are designed to run as servers. For example, this can be used to centralize file sharing on a single dedicated server which users share access to on the network. [102] Server-oriented BitTorrent implementations can also be hosted by hosting providers at colocated facilities with high bandwidth Internet connectivity (e.g., a datacenter) which can provide dramatic speed benefits over using BitTorrent from a regular home broadband connection. Services such as ImageShack can download files on BitTorrent for the user, allowing them to download the entire file by HTTP once it is finished. The Opera web browser supports BitTorrent, [103] as does Wyzo. BitLet allows users to download Torrents directly from their browser using a Java applet. An increasing number of hardware devices are being made to support BitTorrent. These include routers and NAS devices containing BitTorrent-capable firmware like OpenWrt. Proprietary versions of the protocol which implement DRM, encryption, and authentication are found within managed clients such as Pando.

Development

An unimplemented (as of February 2008) unofficial feature is Similarity Enhanced Transfer (SET), a technique for improving the speed at which peer-to-peer file sharing and content distribution systems can share data. SET, proposed by researchers Pucha, Andersen, and Kaminsky, works by spotting chunks of identical data in files that are an exact or near match to the one needed and transferring these data to the client if the "exact" data are not present. Their experiments suggested that SET will help greatly with less popular files, but not as much for popular data, where many peers are already downloading it. [104] Andersen believes that this technique could be immediately used by developers with the BitTorrent file sharing system. [105]

As of December 2008, BitTorrent, Inc. is working with Oversi on new Policy Discover Protocols that query the ISP for capabilities and network architecture information. Oversi's ISP hosted NetEnhancer box is designed to "improve peer selection" by helping peers find local nodes, improving download speeds while reducing the

Legal issues

Although the protocol itself is perfectly legal, problems stem from using the protocol to traffic copyright infringing works. There has been much controversy over the use of BitTorrent trackers. BitTorrent metafiles themselves do not store file contents. Whether the publishers of BitTorrent metafiles violate copyrights by linking to copyrighted works without the authorization of copyright holders is controversial. Various jurisdictions have pursued legal action against websites that host BitTorrent trackers. High-profile examples include the closing of Suprnova.org, TorrentSpy, LokiTorrent, BTJunkie, Mininova, Demonoid and Oink's Pink Palace. The Pirate Bay torrent website, formed by a Swedish group, is noted for the "legal" section of its website in which letters and replies on the subject of alleged copyright infringements are publicly displayed. On 31 May 2006, The Pirate Bay's servers in Sweden were raided by Swedish police on allegations by the MPAA of copyright infringement; [107] however, the tracker was up and running again three days later. In the study used to value NBC Universal in its merger with Comcast, Envisional examined the 10,000 torrent swarms managed by PublicBT which had the most active downloaders. After excluding pornographic and unidentifiable content, it was found that only one swarm offered legitimate content. [108]

In the United States, more than 200,000 people have been sued for filesharing on BitTorrent since 2010.^[109] In 2011, 18.8% of North American internet traffic was used by peer-to-peer networks which equates to 132 billion music file transfers and 11 billion movie file transfers on the BitTorrent network. ^[110] On 30 April 2012 the UK High Court ordered five ISPs to block BitTorrent search engine The Pirate Bay. ^[111]

Security problems

BitTorrent implementations often use μ TP for their communication. To achieve high bandwidths, the underlying protocol used is UDP, which allows spoofing of source addresses of internet traffic. This can be used for Denial-of-service attacks, where users running BitTorrent clients act as amplifiers for an attack at another service. [112]

Challenges

There are many challenges, however, some people believe free riders are a serious issue. Free riders, often referred to as "leeches", are those users who download in plenty but share much less. BitTorrent being a collaborative distributed platform for content sharing, some believe it's very important to develop a solution to detect such "free riders" and punish them so that such a trend is discouraged. [113] However, others believe that it is important to avoid free rider detection and punitive actions in order to protect open access to the information or resources shared via the BitTorrent protocol. Or, in other words, ensure that individuals who lack the resources, knowledge, or security measures necessary to share their—often limited—bandwidth still retain equal access to information. Those who receive the greatest benefit from open, anonymous, or democratic systems are often those least likely to be in a position to support or promote those systems.

Malware

Several studies on BitTorrent have indicated that a large portion of files available for download via BitTorrent contain harmful malware. In particular, one small sample^[114] indicated that 18% of all executable programs available for download contained malware. Another study^[115] claims that as much as 14.5% of BitTorrent downloads contain zero-day malware, and that BitTorrent was used as the distribution mechanism for 47% of all zero-day malware they have found.

BitErrant attack

Due to SHA1 collisions, an attacker can alter the execution path of the executable by serving altered chunks when the victim is downloading the executable using the BitTorrent protocol.^[116]

Criticism of BitErrant attack

Despite the fact that a proof of concept exists, the attack may succeed in very limited cases: such as small chunk size (32kB). By selecting larger chunks (i.e. >256kB) the amount of resources required to find SHA1 collision is tremendous, which makes the attack virtually impossible.

See also

- Anonymous P2P
- Napster
- Gnutella
- Anti-Counterfeiting Trade Agreement
- Bencode
- Cache Discovery Protocol
- Comparison of BitTorrent clients
- Comparison of BitTorrent sites
- Comparison of BitTorrent tracker software
- FastTrack
- Glossary of BitTorrent terms

- Magnet URI scheme
- μTP (Micro Transport Protocol)
- Peer-to-peer file sharing
- Segmented file transfer
- Simple file verification
- Super-seeding
- Torrent file
- Torrent poisoning
- VPN

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External links

- Official website
- Specification
- BitTorrent at DMOZ
- Interview with chief executive Ashwin Navin
- Unofficial BitTorrent Protocol Specification v1.0 at wiki.theory.org
- Unofficial BitTorrent Location-aware Protocol 1.0 Specification at wiki.theory.org
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From Wikipedia, the free encyclopedia

eMule is a free peer-to-peer file sharing application for Microsoft Windows. Started in May 2002 as an alternative to eDonkey2000, eMule now connects to both the eDonkey network and the Kad network. Often used by clients looking for extremely rare content, the distinguishing features of eMule are the direct exchange of sources between client nodes, fast recovery of corrupted downloads, and the use of a credit system to reward frequent uploaders. Furthermore, eMule transmits data in zlib-compressed form to save bandwidth.

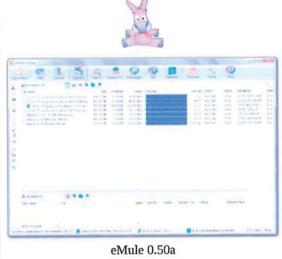
eMule is coded in C++ using the Microsoft Foundation Classes. Since July 2002 eMule has been free software, released under the GNU General Public License; its popularity has led to eMule's codebase being used as the basis of cross-platform clients aMule, JMule, xMule, along with the release of many eMule mods (modifications of the original eMule) on the Internet.

As of August 2017, it is the fourth most downloaded project on SourceForge, with over 685 millions downloads.^[5]

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eMule



Merkur Original author(s)

Developer(s) eMule-Team

Initial release May 13, 2002

0.50a (April 7, 2010^[1]) [±] Stable release

0.50b beta 1 (March 20, 2015^[2]) Preview release

sourceforge.net/p/emule/code Repository

/ci/default/tree/

Development status Active

 $C^{++[3]}$ Written in

Operating system Windows

43 languages^[4] Available in

Peer-to-peer file sharing Type

License **GNU GPLv2**

emule-project.net Website

History

The eMule project was started on May 13, 2002 by Hendrik Breitkreuz (also known as Merkur) who was dissatisfied with the original eDonkey2000 client. Over time more developers joined the effort. The source was first released at version 0.02 and published on SourceForge on July 6, 2002.

eMule was first released as a binary on August 4, 2002 at version 0.05a. The 'Credit System' was implemented for the first time on September 14, 2002 in version 0.19a. The eMule project website started up on December 8, 2002.

Current versions (v0.40+) of eMule have added support for the Kad network. This network has an implementation of the Kademlia protocol, which does not rely on central servers as the eDonkey network does, but is an implementation of a distributed hash table.

Also added in recent versions were the ability to search using unicode, allowing for searches for files in non-Latin alphabets, and the ability to search servers for files with complete sources of unfinished files on the eDonkey network.



In new versions, a "Bad source list" was added. The application adds an IP address to this list after one unsuccessful connection. After adding an IP to the "Bad source list", the application treats this IP as a "dead" IP. Unavailable IPs are banned for a time period from 15 to 45 minutes. Some users have complained that it leads to a loss of active sources and subsequently slows download speed.

Other recent additions include: the ability to run eMule from a user account with limited privileges (thus enhancing security), and Intelligent Corruption Handling (so that a corrupted chunk does not need to be redownloaded entirely).

The 0.46b version added the creation and management of "eMule collection" files, which contain a set of links to files intended to be downloaded as a set.

From 2007, many ISPs have used bandwidth throttling for usual P2P ports, resulting in slow performances.^[6] The 0.47b version adds protocol obfuscation and eMule will automatically select two port numbers at random in the startup wizard.

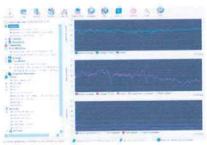
Basic concepts

Each file that is shared using eMule is hashed as a hash list comprising separate 9500 KiB chunks using the MD4 algorithm. The top-level MD4 hash, file size, filename, and several secondary search attributes such as bit rate and codec are stored on eD2k servers and the serverless Kad network.

Users can search for filenames in the servers/kad and are presented with the filenames and the unique identifier consisting of the top-level MD4 hash for the file and the file's size that can be added to their downloads. The client then asks the servers where the other clients are using that hash. The servers return a set of IP/ports that indicate the locations of the clients that share the file.

eMule then asks the peers for the file. eMule will then be queued until an upload slot becomes available.

When a complete chunk of 9,728,000 bytes (9500 KiB) is downloaded and verified, this data is also shared by the downloader, helping others to download the file as well.



File transfer statistics of v048a



Search parameters in eMule v0.50a

It is also possible that a client knows other clients that are also sharing that same file. In that case a source exchange between the clients is made. This exchange of known peers is done directly between the peers.

Newer versions of eMule support AICH (*Advanced Intelligent Corruption Handling*). It is meant to make eMule's corruption handling competitive with BitTorrent. SHA-1 hashes are computed for each 180 KiB subchunk and a whole SHA-1 hash tree is formed. AICH is processed purely with peer-to-peer source exchanges. eMule requires 10 agreeing peers regarding the SHA-1 hash, so rare files generally do not benefit from AICH.

Low ID

Users who cannot be reached from the outside because they are firewalled, behind a NAT device that has not been correctly port forwarded, or whose IP address ends with a zero (e.g. 123.45.67.0)^[7] get a "Low ID" from the servers. They are still able to upload and download but need the help of servers or other kad clients to be reached by other clients. Since they cannot be notified that they are in front of an upload queue, they have to poll peers if an upload slot is available. Since they cannot connect to any other Low ID clients, they see only 40%-60% [8] of the clients that a High ID can see. Their IP/ports are not exchanged between other peers, limiting their possibilities for finding sources via eMule's pure-P2P source exchange.

A Low ID client also consumes a lot more data ^[9] on an eserver than a High ID client due to the lowidcallbacks. Also, a releaser or heavy uploader that uses a releaser mod such as MorphXT or Xtreme that is forced to operate on a Low ID (hotel room, job) also will find that he will have little control over his upload priorities (especially powershares) as the servers appear to limit their connection-forwarding for each client, thus turning his upload queue to a contention situation where the first to be able to get forwarding and find an open slot gets it.

Credit system

Credits are not global; they are exchanged between two specific clients. The credit system is used to reward users contributing to the network, i.e. uploading to other clients. The strict queue system in eMule is based on the waiting time a user has spent in the queue. The credit system provides a major modifier to this waiting time by taking the upload and download between the two clients into consideration. The more a user uploads to a client the faster he advances in this client's queue. The modifiers are calculated from the amount of transferred data between the two clients. The values used can be seen in the client's details dialog. To view this information, right-click on any user and choose View Details.

All Clients uploading to you are rewarded by the credit system. It does not matter if the client supports the credit system or not. Non-supporting clients will grant you no credits when you upload to them. Credits are stored in the clients.met file. The unique user hash is used to identify the client. Your own credits are saved by the client who owes you the credit. This prevents faking the credits. Your own credits cannot be displayed.

The computation formula for the Official Credit System is composed of two ratios as follows:^[10]

$$ext{Ratio}_1 = rac{2 \cdot Uploaded\ Total}{ ext{Downloaded\ Total}}$$

$$ext{Ratio}_2 = \sqrt{Uploaded\ Total} + 2$$

Both ratios are then compared and the lower one is used as the modifier. A few conditions exist:

- If the Uploaded Total is less than 1 MB, then the modifier will remain at 1.
- If the client uploads data but doesn't download any, the modifier will be fixed at 10.
- The modifier can only be between 1 and 10.

An exception to this rule applies only when a peer is assigned a "Friend Slot" after being added to the client's Friends list. This automatically assigns a reserved upload slot for that peer so that he/she can begin downloading regardless of the Credit rating. Only one Friend Slot can be reserved so as to prevent any form of abuse such as upload discrimination.^[11]

eMule compared to other P2P applications

One of the advantages of eMule is its large user base, currently averaging 3 to 4 million people, which share some 4 billion files, which makes it excellent for finding rare content. It is said to be the most complete implementation of the eD2k protocol and its extensions. eMule supports AICH, making its corruption handling

competitive with BitTorrent. eMule also supports source exchanges, allowing it to substantially reduce the loads on the servers and Kad. With a High ID and well-sourced downloads pre-acquired by server and/or Kad, eMule is able to sustain the peer sources on these files independent longer after disconnection from eD2k and Kad.

eMule mods

As a popular open source program, eMule has many variants, usually called mods. Some mods started as forks from official eMule versions, and then continued to develop independently rather than modifying newer official versions. An example of this type of mod is the obsolete eMule Plus. Since eMule Plus forked off before the release of v0.30, the first official version to include Kad, eMule Plus does not support this feature mainly because the project development has been abandoned for about 4 years. Other current mods follow official eMule releases and make their own releases based on each new release of the official version. Since distributed mods are required to publicly share their source code by the GNU General Public License, useful features created by mod developers can be quickly incorporated into an official version. Among the eMule mods, MorphXT began in January 2003 and is considered to be one of the earliest, Xtreme is one of the most popular. [12]

Fake eMule sites and malware

Due to the popularity and open source nature of eMule, some third parties have created modified versions of it, which frequently contain spyware and other malware programs. Some fake sites ask for credit card information or require the user to sign up for a paid membership. The official eMule is free.

These versions are usually found via rotating advertisements sometimes placed on legitimate sites.^{[13][14]}

Chinese mods of eMule client

VeryCD's easyMule is a popular eMule client among Chinese users. It has a simplified interface and lacks some advanced settings available in the standard eMule client. As of version 1.1 it only supports searching through the VeryCD database, though external eD2k links are accepted. Some criticized VeryCD for their misleading name "Dianlv" (Chinese: 电身; pinyin: $Dian L\ddot{u}$; literally: "Electronic Donkey"; generally the Chinese name for eDonkey or eMule) and the site emule.org.cn, which is named "Dianlv (eMule) Chinese Site" (电身)(eMule)中文网站). [15][16]

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See also

- eDonkey network
- Kad network
- Comparison of eDonkey software
- Comparison of file sharing applications
- List of computing mascots
- Category: Computing mascots

External links

- Official website
- eMule on SourceForge.net
- Official forum
- Official IRC network (MindForge)
- eMule Protocol Specification by Danny Bickson and Yoram Kulbak from Hebrew University of Jerusalem
- Glasnost test eMule traffic shaping (Max Planck Institute for Software Systems)
- eMule at DMOZ

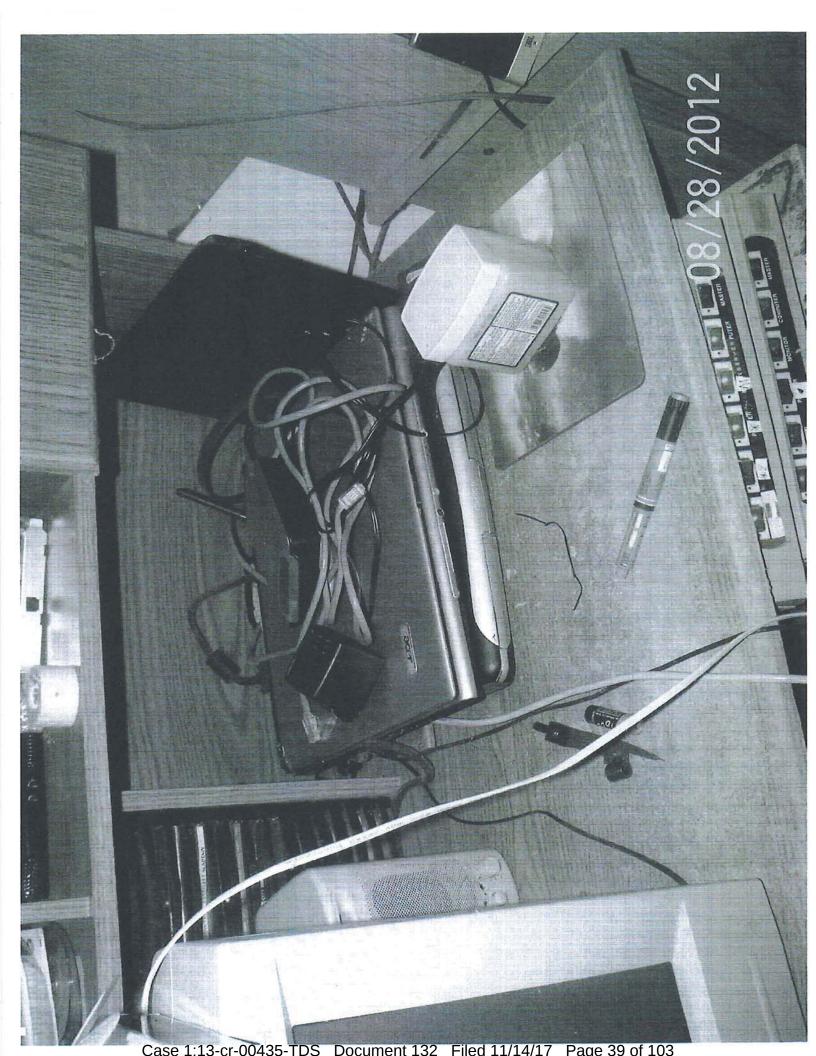
Retrieved from "https://en.wikipedia.org/w/index.php?title=EMule&oldid=796457073"

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For Federal criminal case
-- BRIEF / MEMORANDUM IN SUPPORT OF
BRIAN DAVID HILL'S "MOTION UNDER 28
USC § 2255 TO VACATE, SET ASIDE, OR
CORRECT SENTENCE BY A PERSON IN
FEDERAL CUSTODY" - DECLARATION,
ATTACHED EXHIBITS, AND BRIEF IN
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SUPPORT OF THIS MOTION -United States of America v. Brian David Hill
(Brian D. Hill) (formerly USWGO Alternative
News)



Subject: Copy of documentation that will be sent to the town council

From: Brian Hill <admin@uswgo.com>

Date: 3/12/2012 4:11 PM

To: Lessa Hopper <mhopper@townofmayodan.com>, Michael Brandt

<mbrandt@townofmayodan.com>

Dear Lessa Hopper and Michael Brandt,

I Brian D. Hill have made a digital PDF copy of the very same document in-print that I am going to be delivering to the town council today. I have certified my digital PDF document myself as to being the same copy as the document each town council member, the town clerk, and the town attorney will get. The town manager can simply overview the copy given to the town clerk. The reason is I like it to be on the town official public records. I have made 5 copies in-print for 3 of the 5 council members, the town attorney Philip E. Berger, and the town clerk to keep in town records. I like to request the town clerk make two more copies (from the PDF Attached) to which I will pay the \$0.10 a page fee, the whole document is 59 pages and I only need two more copies to giver to the two town officials. I will hold off on giving the mayor a copy until the town debates Agenda 21. I prefer the council debating it first and researching all the facts before it gets to the mayors attention. The document will also be added on scribd which is on the public record.

Sincerely, Brian D. Hill

Home: (336)510-7972

Home: 413 N. 2nd ave. Mayodan, NC 27027

Admin, Founder, webmaster, and head reporter of USWGO Alternative News (uswgo.com)

Reporter of FederalJack.com and We Are Change

admin@uswgo.com

Attachments:

Documentation for the Mayodan Town Council Finalized(Certified).pdf

27 bytes

For Federal criminal case
-- BRIEF / MEMORANDUM IN SUPPORT OF
BRIAN DAVID HILL'S "MOTION UNDER 28
USC § 2255 TO VACATE, SET ASIDE, OR
CORRECT SENTENCE BY A PERSON IN
FEDERAL CUSTODY" - DECLARATION,
ATTACHED EXHIBITS, AND BRIEF IN
SUPPORT OF THIS MOTION -United States of America v. Brian David Hill
(Brian D. Hill) (formerly USWGO Alternative
News)



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        Sun, 7 Apr 2013 02:33:19 -0700 (PDT)
X-Received: by 10.180.188.3 with SMTP id fw3mr7163560wic.33.1365327198921;
        Sun, 07 Apr 2013 02:33:18 -0700 (PDT)
Return-Path: <johnsnatchz@tormail.org>
Received: from outgoing.tormail.org (outgoing.tormail.org. [82.221.96.22])
        by mx.google.com with ESMTPS id x17si3290773wiv.114.2013.04.07.02.33.18
        (version=TLSv1 cipher=RC4-SHA bits=128/128);
        Sun, 07 Apr 2013 02:33:18 -0700 (PDT)
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82.221.96.22 as permitted sender) client-ip=82.221.96.22;
Authentication-Results: mx.google.com;
       spf=pass (google.com: domain of johnsnatchz@tormail.org designates 82.221.96.22
as permitted sender) smtp.mail=johnsnatchz@tormail.org;
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Received: from localhost ([127.0.0.1] helo=internal.tormail.org)
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        for admin@uswgo.com; Sun, 07 Apr 2013 13:33:17 +0400
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Received: from johnsnatchz by internal.tormail.org with local (Exim 4.63)
         (envelope-from <johnsnatchz@tormail.org>)
         id 1UOlwB-0001eb-DJ
        for admin@uswgo.com; Sun, 07 Apr 2013 09:30:59 +0000
Date: Sun, 7 Apr 2013 09:30:59 -0000
 Subject: You better watch out......
 From: johnsnatchz@tormail.org
 To: admin@uswgo.com
 MIME-Version: 1.0
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 Content-Transfer-Encoding: 8bit
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 Disposition-Notification-To: johnsnatchz@tormail.org
 Importance: High
 Return-Receipt-To: johnsnatchz@tormail.org
 X-TorMail-User: johnsnatchz
 Message-Id: <1UOlwB-0001eb-DJ@internal.tormail.org>
 You better watch out Brian...We are watching you...Having child porn
 planted on your hard drives and computer was only the beginning and we
 will set you up for violent sex crimes if you don't watch your back...Have
 fun becoming a sex offender...Police won't believe you no matter how much
 evidence you have that you been set up we know some people in the SBI who
 will make sure you are convicted. You will be shut up by being a sex
 criminal. Your friends Alex Jones, Dan, James, Sean, Alex, and others are
 next...BeWare!
```

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INCIDENT/INVESTIGATION REPORT

Page 2

OCA

2012-00287

Mayodan Police Department

Status Codes	L = Lo	st S=	Stolen	R = Reco	vered D	= Damag	z = Seize	d B	= Burned	C =	Cou	nterfei	t / For	ged I	· = FOU	nd .	in to 2	tunes of	activity for e	ach
Coues	DCI	Status	On	antity	Type M	easure		Su	spected T	уре	=====			Posse		uy	Sale	Mfg	Importing	Operating
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D R					-								in consecution	-						
U G					-											SW0				
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					-															
0	Offender Used Die Offender 1						Offender 2				Offende						Primary	Primary Offender Resident Status		
F		cohol/D	1]Yes ∏Uı]No ∏N		3			Age: 4				Age: Race:			Race:	Sex: Reside		sident	
N D	Computer Yes Unk Offender 4						Offend						-	Offender 6 □ Non Age: Race: Sex: □ Unk				n-Resident known		
R	No □N/A Age: Race: Sex:							0.00	Age: Race: Sex:				1.	Home Address						
	Name	Name (Last, First, Middle) HILL, BRIAN DAVID							0 Khown	wn As 413 North 2					rth 2n	2nd Avenue, Mayodan NC				
	Occu	Occupation DISABLED						Business Address												
S U S P E C		OOB. /			Race	Sex Hgt			Wgt Build			Hair	Color	Color Hair		yle	Hair	Length	100	Glasses
	10000	State		24	W	M	600	185			BLO						4,000.4	BLU		
	Scar	rs, Mark	s, Tatto	os, or other	distingui	shing feat	ures (i.e. limp,	forcig	n accent,	voice	chara	acterist	tics)							
				Inali	at		Shirt/Blouse	- T	Tie/Scar	rf	Т	Coat	/Suit		Par	nts/D	ress/Sk	irt	Socks	Shoes
T	H	Hat Jacket					Sille										1			
	Was Suspect Armed? Type of Weapon Direction of Travel Mode of Trave												vei							
	L Colo							Color	Lic/Lis				1	Vin						
	VYI	3 1	Иake	Model		Style			Color								ex Mobile Phone			
	Name (Last, First, Middle)									D.O.B.		Age Race Sex Mol					иовне Р	none		
WIT											Disease			Employer				Phone		
NES!	Home Address								Home Phone			Employer								
*************	-	Suspect Hate / Bias Motivated: □ Yes ☑ No Unknown (Offender`s motivation not known)																		
																	+ TO	dd B	rim re	reived a
N	On Wednesday, August 22, 2012 at 1400 hours, I, Detective Sergeant Todd Brim, received a report of a possible Child Pornography case at 413 North 2nd Avenue in Mayodan, North																			
A R		report of a possible Child Pornography case at 415 North Zhu hvende In hej																		
R	I met with Reidsville Police Detective Robert Bridge at his department to discuss this																			
A T	I	met	with	Reids	ville	Poli	ce Detec	tiv	e Rob	ert	Br.	idge	at of	his	de)	par	tmer	it to Trime	s Again	s this st
I	case. Detective Bridge stated that he was a member of the Internet Crimes Against Children (ICAC) Task Force. According to Detective Bridge, he discovered that an																			
V E	C	nildi nteri	cen (net F	rotoco	lask) add	ress in	our	juri	sdi	cti	on w	ıas	bei	ng u	sec	l to	down	load ch	ild
		Internet Protocol (IP) address in our jurisdiction was being used to download child pornography.																		
						r - 1 0000 - 1700					For	+hc	TD	200	dree	e i	nfoi	cmati	on, and	
	1 1	- 4		J bat	than I	D and	btained	re	giste	rea	LO	KOI)err	d n	1 1 1	OT	ゴエつ	TAOT	.11 2110 1	
	1 3.6	Detective Bridge said he obtained a subpoema for the radiation of Ala North 2nd Avenue in determined that the IP address was registered to Roberta Hill of 413 North 2nd Avenue in Mayodan, North Carolina. Using this information, I confirmed that Roberta Ruth Hill																		
	and her son, Brian David Hill, resided at this residence through verillication of																			
	u	utilities and police officer knowledge.																		
	1	At 1430, I phoned Chief Charles Caruso and asked him to drive by the residence and photograph it with his cellular phone. I also requested that he check for any open and																		
	1	1 - 1			+h h	0 001	lular ph	none		als	o r	eau	este	ea t	11dt	HE	CHE	CV TO	or arry	pen and
	- M.C.			HEAT ! TO	111 010	ofeny	in the	area	1. He	nd f	otc	ora	onec	ıtn	e re	SI	renc	e and	1 Hored	Liide iid
	U	nsec	ured	"Wi-F	i" sid	gnals	were be:	ıng	proac	ıcas	rec	т рА	dn]	re	PTOE	111	J LII	CHE	arca o.	

INCIDENT/INVESTIGATION REPORT

Mayodan Police Department

Narr. (cont.) OCA: 2012-00287

North 2nd Avenue.

While in Detective Bridge's office, he showed me the webpages and downloaded files that were retrieved by the ICAC software. The videos downloaded by the Hill's IP address (24.148.156.211) were child pornography, commonly referred to as Pre-Teen Soft Core (PTSC) and Pre-Teen Hard Core (PTHC). I personally viewed a five second segment of each video and confirmed that it was child pornography.

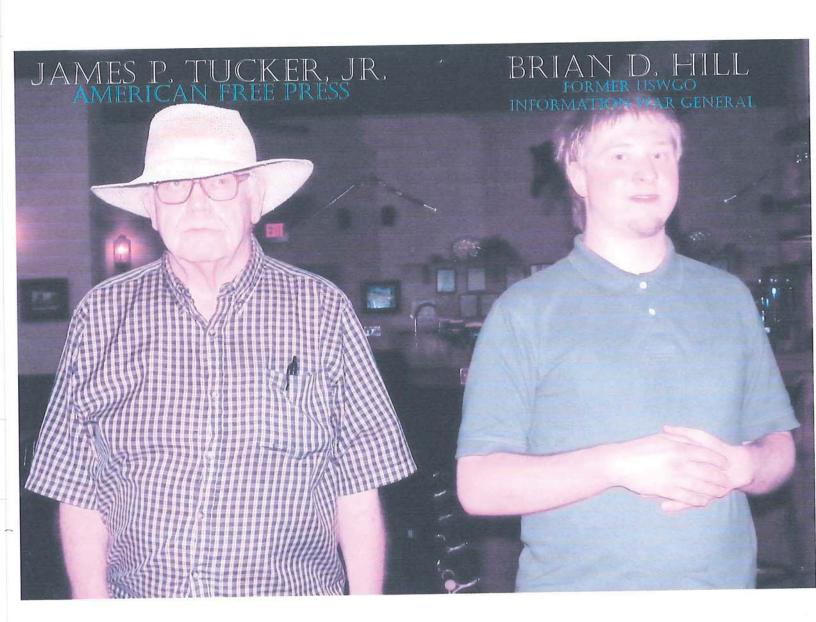
Detective Bridges said that the person or persons using IP address 24.148.156.211 were utilizing Peer to Peer (P2P) file sharing programs to download pornographic videos and pictures of children. These programs require that the person operating the computer search for specific content to download. Therefore, it was determined that whomever downloaded the images and videos using IP address 24.148.156.211 did so deliberately and not accidentally. Using this information, Detective Bridge and I wrote a search warrant for Roberta Ruth Hill, Brian David Hill and the premises and property located at 413 North 2nd Avenue in Mayodan, North Carolina.

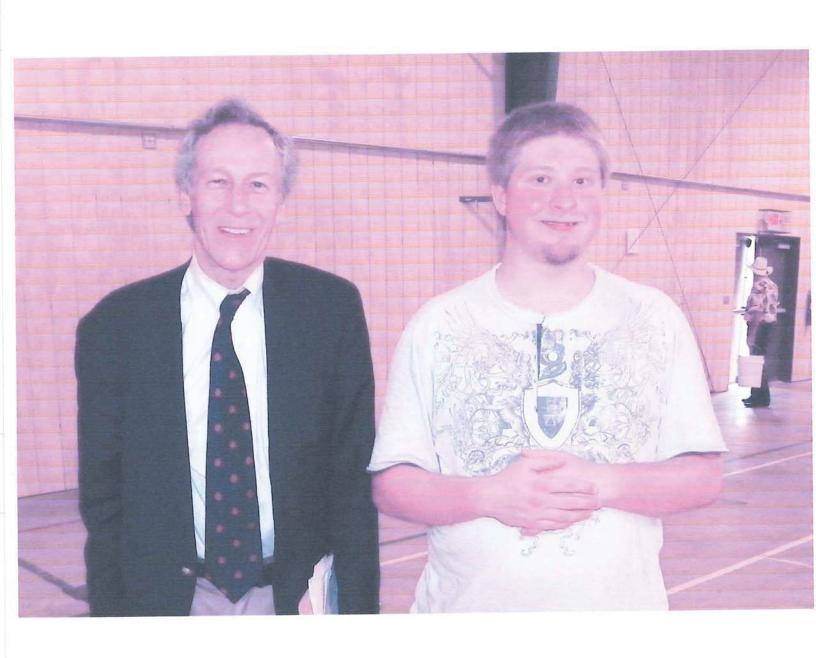
Page 3

For Federal criminal case
-- BRIEF / MEMORANDUM IN SUPPORT OF
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USC § 2255 TO VACATE, SET ASIDE, OR
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(Brian D. Hill) (formerly USWGO Alternative
News)

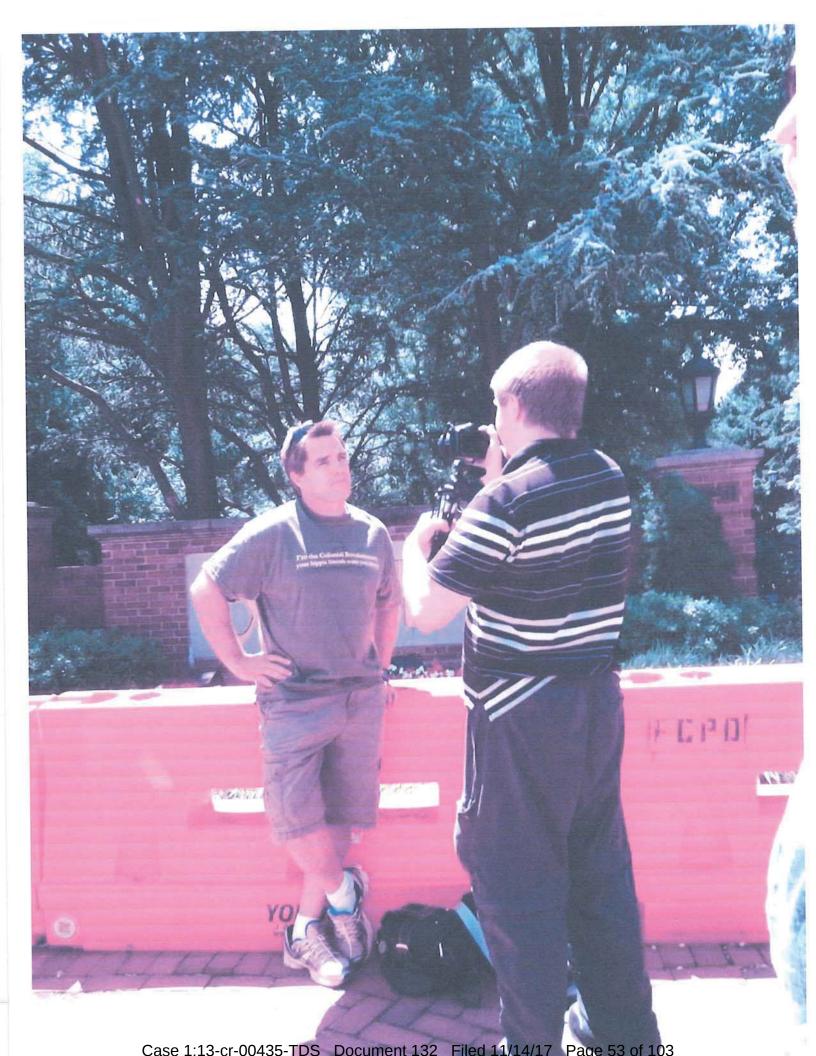












For Federal criminal case
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Criminal Case Number 1:13-cr-00435-1

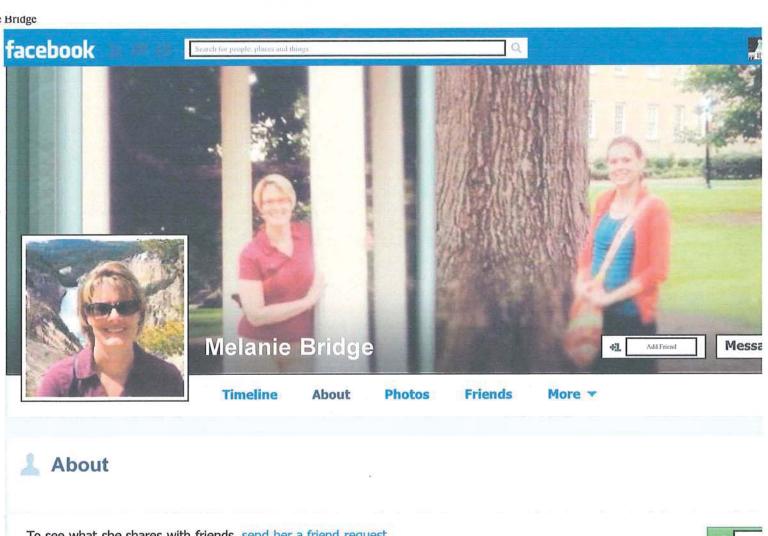


LOCATED IN EXPANDABLE FOLDER IN CLERK'S OFFICE

2									
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5	LOCATED IN EXPANDABL	LE FOLDER IN CLERK'S OFFICE							
6									
7		ATES DISTRICT COURT							
8	THE STATE OF THE S	IICT OF NORTH CAROLINA ISBORO DIVISION							
9		50 C SANSON 12.							
	United States of America								
10	Plaintiff(s),	Case No. 1:13-cr-00435-1							
11	v.	NOTICE OF FILING PAPER OR							
12	Brian David Hill	PHYSICAL MATERIALS WITH THE CLERK							
13	Defendant(s),								
14	Part of Exhibit 22, Video DVD disc filed in attack "BRIEF / MEMORANDUM IN SUPPORT OF BR	RIAN DAVID HILL'S "MOTION UNDER 28 USC § 2255							
15	TO VACATE, SET ASIDE, OR CORRECT SENT "DECLARATION, ATTACHED EXHIBITS, ANI								
16		is being filed in paper or							
17		ne Middle District of North Carolina. The item will							
18		isposition pursuant to the Local Rules of the Middle							
19	District of North Carolina. DATED this 10th day of	November , 2017							
20		Brian D. Hill Signed							
21		Signed							
		Brian D. Hill (Pro Se) 310 Forest Street, Apartment 2							
22		Martinsville VA 24112							
23		Phone #: (276) 790-3505							
24									
25		Name, Address, and Phone Number of Counsel or Pro Se							

For Federal criminal case
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SUPPORT OF THIS MOTION -United States of America v. Brian David Hill
(Brian D. Hill) (formerly USWGO Alternative
News)





To see what she shares with friends, send her a friend request.

Work and Education

Rockingham County District Attorney's Office

Assistant District Attorney · Oct 2005 to present

Wet 'n Wild Emerald Pointe

The University of North Carolina at Chapel Hill

JD · Law · Chapel Hill, North Carolina

Brigham Young University

ittps://www.facebook.com/melanie.bridge.3/about[6/26/2013 1:02:18 AM]

Basic Information

Gender

Female

Relationship Status

Class of Brigham Young University 2002 · Comm.: Print Journalism · Provo, Utah



Eisenhower High School Class of 1996 * Decatur, Illinois



Page High School Class of 1996 · Page, Arizona

Family



Robert Bridge Brother



Melinda Robert Ross Cousin



Paul Bridge Cousin



Anna Naylor Bridge Sister-in-law



Kirk Walton

See All

ittps://www.facebook.com/melanie.bridge.3/about[6/26/2013 1:02:18 AM]



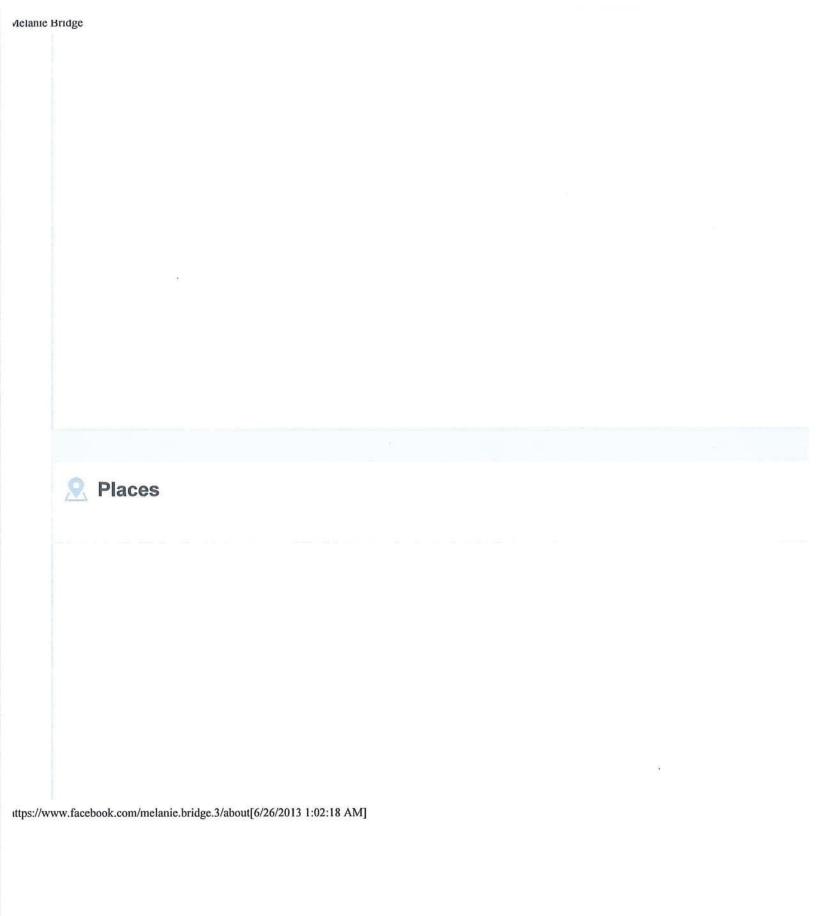
Photos Albums

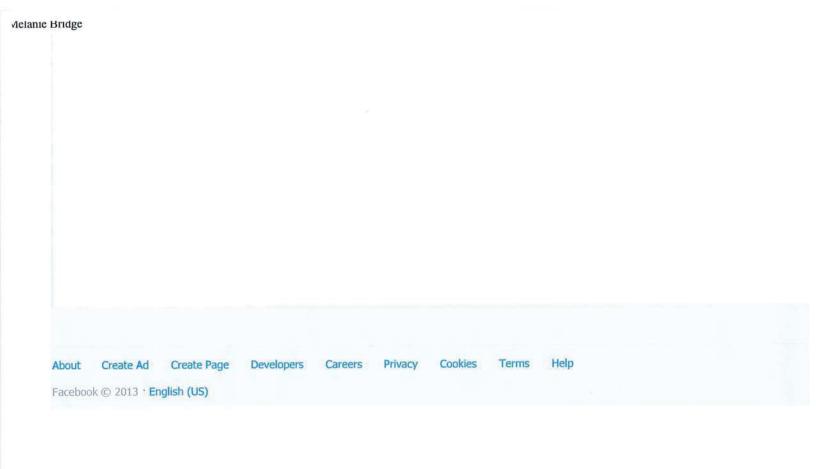


See All



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ıttps://www.facebook.com/melanie.bridge.3/about[6/26/2013 1:02:18 AM]



1 mutual friend

 $ittps://www.facebook.com/robertbridge55/friends?collection_token=624595022\%3A2356318349\%3A2\&next_cursor=MDpub3Rfc3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2356318349\%3A2\&next_cursor=MDpub3Rfc3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2356318349\%3A2\&next_cursor=MDpub3Rfc3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2356318349\%3A2\&next_cursor=MDpub3Rfc3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2356318349\%3A2\&next_cursor=MDpub3Rfc3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2356318349\%3A2\&next_cursor=MDpub3Rfc3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2356318349\%3A2\&next_cursor=MDpub3Rfc3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2356318349\%3A2\&next_cursor=MDpub3Rfc3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2356318349\%3A2\&next_cursor=MDpub3Rfc3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2356318349\%3A2\&next_cursor=MDpub3Rfc3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2356318349\%3A2\&next_cursor=MDpub3Rfc3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2356318349\%3A2\&next_cursor=MDpub3Rfc3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2\&next_cursor=MDpub3Rfc3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2\&next_cursor=MDpub3Rfc3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2\&next_cursor=MDpub3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2\&next_cursor=MDpub3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2\&next_cursor=MDpub3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2\&next_cursor=MDpub3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2\&next_cursor=MDpub3RydWN0dXJIZDoxMDAwMDIzCollection_token=624595022\%3A2\&next_cursor=MDpub3RydWN0dXJIZOxAA2\&next_cursor=MDpub3RydWN0dXJIZOxAA2\&next_cursor=MDpub3RydWN0dXJIZOxAA2\&next_cursor=MDpub3RydWN0dXJIZOxAA2\&next_cursor=MDpub3RydWN0dXJIZOxAA2\&next_cursor=MDpub3RydWN0dXJIZOxAA2\&next_cursor=MDpub3RydWN0dXJIZOxAA2\&next_cursor=MDpub3RydWN0dXJIZOxAA2\&next_cursor=MDpub3RydWN0dXJIZOxAA2\&next_cursor=MDpub3RydWN0dXJIZOxAA2\&next_cursor=MDpub3RydWN0dXJIZOxAA2\&next_cursor=MDpub3R$

Wake Forest University



Anna Naylor Bridge North Liberty, Iowa



Jerry Hacker
Works at Reidsville Police
Department





Paul Bridge Utah



MichaelandStephanie DeHart Police Officer at City of Reidsville Police Department





Kenny Paschall





Jeremy Revis Rockingham Community College





Melanie Bridge Assistant District Attorney at Rockingham County District Attorney's Office





Mandee Bridge Scofield Salt Lake City, Utah





Eric HalstenThe University of North Carolina at Greensboro - UNCG





Ken Nickerson





Jason Gale California Polytechnic State University





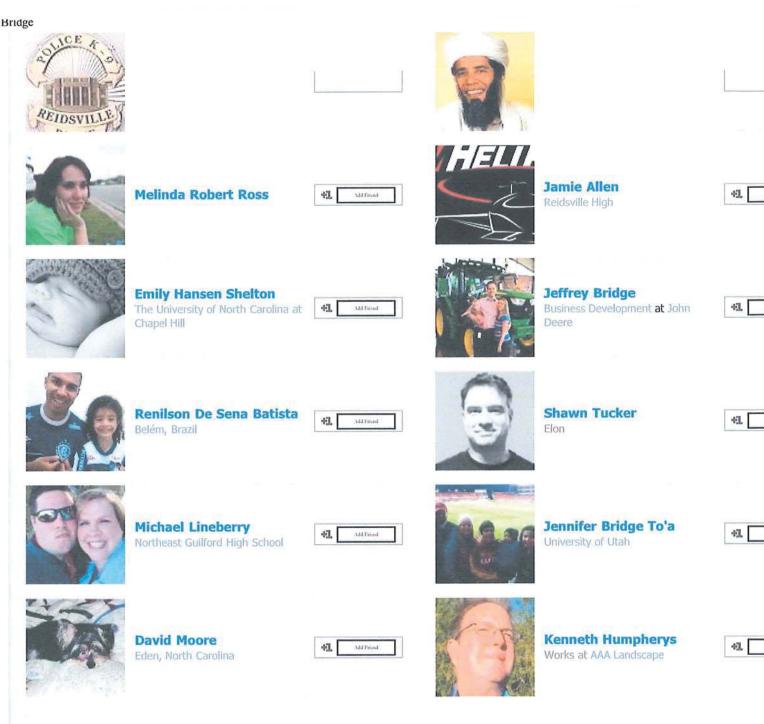
Nikki Hibbert Bridge BYU-Idaho



Woody Hutchens

Add Friend

Mike Wilkinson Greensboro, North Carolina +3.



John Nielsen

41

Chris Macey 42. Rockingham County High School

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Jenni Walton Dickerson



- TT

Becca Lawler Kearl





Rob Compton Reidsville, North Carolina



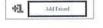


Abel Mosqueda GTCC





Alice Hansen Bridge





Sarah Rembert Oatsvall
Assistant Director of Curriculum and
Instruction at Lawrence Public
Schools USD 497





Ali Bridge Fatoma, Mopti, Mali





Brian Oakley Rockingham Community College



Ellen Rasmussen Brigham Young University





Kristin Bridge Haslam Salt Lake City, Utah



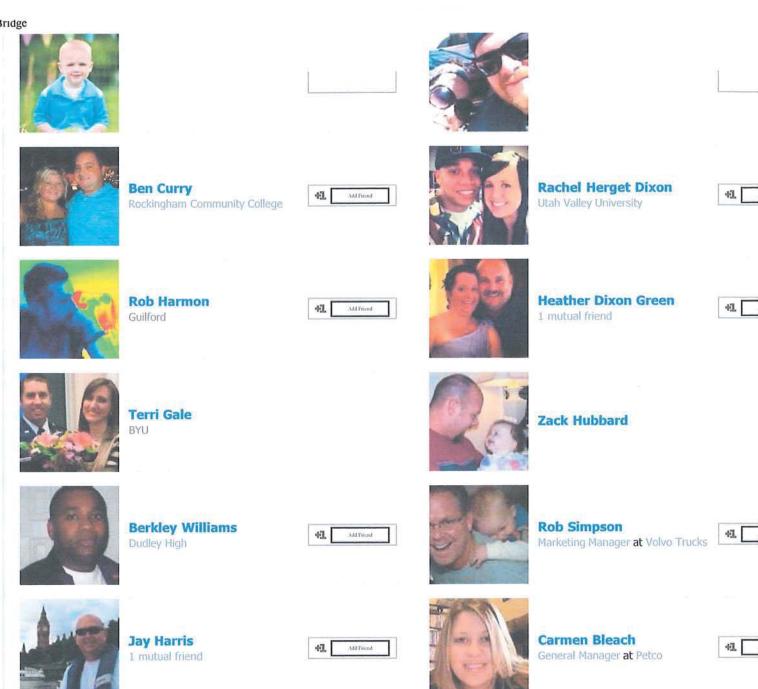




Melody Causby
UNC Greensboro

43.

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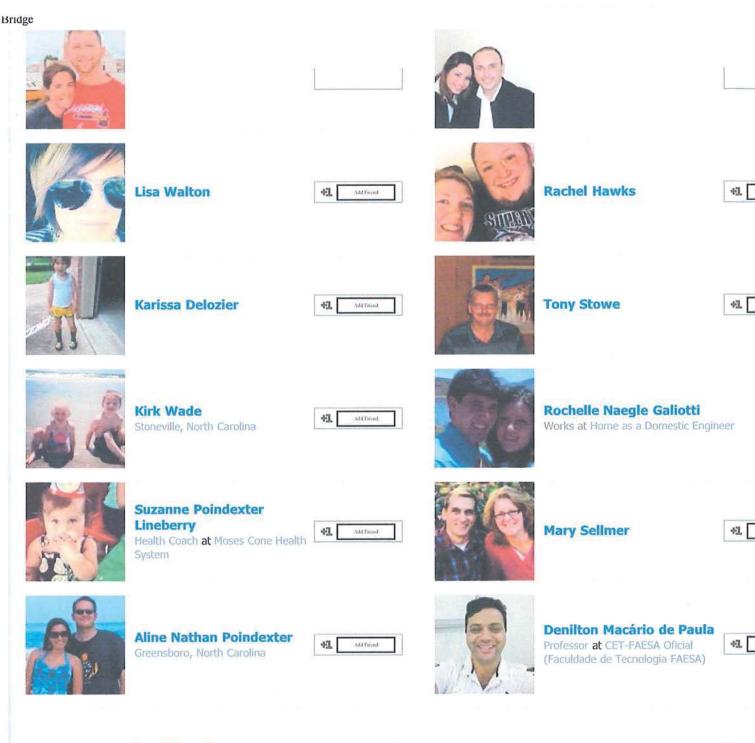
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Lee Edmonds Works at City of Reidsville

+3. Add Friend **Richard Christensen**

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For Federal criminal case
-- BRIEF / MEMORANDUM IN SUPPORT OF
BRIAN DAVID HILL'S "MOTION UNDER 28
USC § 2255 TO VACATE, SET ASIDE, OR
CORRECT SENTENCE BY A PERSON IN
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ATTACHED EXHIBITS, AND BRIEF IN
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(Brian D. Hill) (formerly USWGO Alternative
News)

Criminal Case Number 1:13-cr-00435-1



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10	United States of America Plaintiff(s),	Case No. 1:13-cr-00435-1
11	v.	NOTICE OF FILING PAPER OR
12	Brian David Hill	PHYSICAL MATERIALS WITH THE CLERK
13	Defendant(s),	
14	Part of Exhibit 24, Video DVD disc filed in attact "BRIEF / MEMORANDUM IN SUPPORT OF B TO VACATE, SET ASIDE, OR CORRECT SEN" "DECLARATION, ATTACHED EXHIBITS, AN	TENCE BY A PERSON IN FEDERAL CUSTODY"" -
16	physical form with the Clerk's Office for t	he Middle District of North Carolina. The item will
17	in the Clerk's custody until appropriate o	disposition pursuant to the Local Rules of the Middle
18	District of North Carolina.	2017
19	DATED this 10th day of	November , 2017 Brian D. Hill
20		Signed
21		Brian D. Hill (Pro Se)
22		310 Forest Street, Apartment 2 Martinsville VA 24112
23		Phone #: (276) 790-3505
24		All we blomber of Counsel or Pro Se
25		Name, Address, and Phone Number of Counsel or Pro Se

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Topic: The Police are harassing my mom now (Read 3088 times)

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uswgo

Guest

The Police are harassing my mom now

« on: July 12, 2012, 07:57:02 PM »

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□ Ambriel

Member



Posts: 1,683 Dare to resist



□ Ryujin

Member



Posts: 459

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uswgo

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My Website

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Criminal Case Number 1:13-cr-00435-1



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14	Part of Exhibit 29, Video DVD disc filed in attac "BRIEF / MEMORANDUM IN SUPPORT OF BI	RIAN DAVID HILL'S "MOTION UNDER 28 USC § 2255		
15	TO VACATE, SET ASIDE, OR CORRECT SENT "DECLARATION, ATTACHED EXHIBITS, AND	TENCE BY A PERSON IN FEDERAL CUSTODY"" - D BRIEF IN SUPPORT OF THIS MOTION" is being filed in paper or		
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Criminal Case Number 1:13-cr-00435-1



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From: Brian Hill <admin@uswgo.com>

Sent: Thursday, July 12, 2012 2:54 PM

To: Dan Frosch

Subject: Audio Recording from netbook and Photo of my

notepad with questions to ask Phil Berger

Attachments: 100_9098.JPG; Audio of being kicked out of the town

council.mp3

The audio came from my netbook. I have the part of me asking a question at first so you know right when I was forced out and protested a bit by saying something for them to hear while I was grabbing my stuff, I said that it was NWO Oppression and told phil berger and the cop to have fun with the nwo. Then after the door was closed when I asked the cop to let me get my netbook he gave me permission so I got the netbook and that is when I said to the microphone (The cop would think I was talking to myself but I was really talking to the microphone as I was walking in the hall to the town hall office with two waiting seats.

Sincerely, Brian D. Hill (336)510-7972

413 N. 2nd ave. Mayodan, NC 27027

Founder and Head Reporter of USWGO Alternative News and Head Activist of it's Political Action Center (uswgo.com)

Reporter of FederalJack.com and We Are Change admin@uswgo.com

Audio Recording from netbook and Photo of my notepad with questions to ask Phil Berger Brian Hill <admin@uswgo.com> 7/12/2012 2:53 PM
Dan Frosch <daniel.frosch@nytimes.com>

The audio came from my netbook. I have the part of me asking a question at first so you know right when I was forced out and protested a bit by saying something for them to hear while I was grabbing my stuff, I said that it was NWO Oppression and told phil berger and the cop to have fun with the nwo. Then after the door was closed when I asked the cop to let me get my netbook he gave me permission so I got the netbook and that is when I said to the microphone (The cop would think I was talking to myself but I was really talking to the microphone as I was walking in the hall to the town hall office with two waiting seats.

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Center (uswgo.com)	
Reporter of FederalJack.com and We Are Change	
admin@uswgo.com	
-100_9098.JPG-	
Attachments:	
100_9098.JPG	1.2 MB
Audio of being kicked out of the town council.mp3	2.9 MB

Questions for Phil Berger We are Change NC Ushigo Alternative News Why did you fecide to take no conaction on the Wullity-Your view on the

Case 1:13-cr-00435-TDS Document 132 Filed 11/14/17 Page 93 of 103

For Federal criminal case
-- BRIEF / MEMORANDUM IN SUPPORT OF
BRIAN DAVID HILL'S "MOTION UNDER 28
USC § 2255 TO VACATE, SET ASIDE, OR
CORRECT SENTENCE BY A PERSON IN
FEDERAL CUSTODY" - DECLARATION,
ATTACHED EXHIBITS, AND BRIEF IN
SUPPORT OF THIS MOTION -United States of America v. Brian David Hill
(Brian D. Hill) (formerly USWGO Alternative
News)

Criminal Case Number 1:13-cr-00435-1



Monday, October 21, 2013

(347) 989-0106 7:00PM FRI-SUN - CALL IN TO USWGO The new Drudge? Like this

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Reporter intimidated and booted from town council when asking a question

July 10, 2012 by Brian D. Hill (Edit)

Filed under Brian D. Hill's Articles, Building the Police State,

USWGO

Author: Brian D. Hill

Note: This is all alleged since only I am coming forth about what happened to me. Of course the RockinghamUpdate reporter was around the area as well but I don't trust RockinghamUpdate as they refused to cover any significant local stories about Mayodan citizens resisting the NDAA 2012 law. I am up for interviews and I promise that everything I say is the truth as it is my duty and responsibility to expose anything that doesn't seem right. I must tell people what happened while it is fresh in my mind although this has been posted days later after the draft has been made as I fear the police are watching my website and are looking for a way to come after me so I am laying low and publish this at least 3 days after the incident. Remember my witness report is just an alleged report since only I have decided to write on this.

Reporter intimidate	d and booted from town council when asking a question USWGO Alternative News
all I go Ne	around July 9th, 2012 during the Mayodan Town Council meeting, things go from bad to worse at the town council meeting, and I did as a reporter was ask NC State Senator Phil Berger a question before the chief of police forced me out which is in the video of recorded. Somehow I recorded audio when the cop forced me out the whole time and even left a remark to have fun with the w World Order multiple times before getting my stuff. There was no audio of the cop intimidating me though but at least I got a ording of part of the whole ordeal.
	st while the people were around and leaving the cop told me that when the session closes I am suppose to leave out of there so

a criminal. Then of course the cop went further in making sure I never go up to state senator Phil Berger to ask him a question. Then minutes later when I was going to explain to the officer that I have type 1 brittle diabetes, he interrupted me then started telling me that the way I was going up to the state senator with a camera (Like I was in the wrong for that), told me how like those city council meeting videos on TV where someone comes sup quickly to shoot a political official, and acted as though I was coming up to him fast to do something terrible to him or even do something that threatens his life. He said that he knows that I didn't show that I was intending to do that but then he started saying to me that if I go up to the state senator like that again he will push me back or something like that. Basically he was gonna force me back as if I am gonna hurt him or go into a bar without an ID. That was the

way he was acting and being close to me, close to my space. Then I told him I promise I won't do that again then he badgered me a little bit more then I said I am sorry and said scouts honor then he backed off. Then when my mom came in to the town hall office

area to check up on me, whenever she left she saw the chief of police watching us and that gave her a bad feeling.

Mayodan Chief of Police and the entire town council is no doubt apart of the New World Order. They know who I am and they know what I stand for so I will have to lay low after the two postings I will make. Please stand for us or we will all hang separately. Even if they aren't 100% in on the New World Order money masters they are apart of this partially by some subsidiary group or pack of corporations that work with the Bilderberg Group. The town of Mayodan is not immune to the garbage and BS of the New World Order and that is a fact as a news reporter I have been in 2-3 years.

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Nags: asking, booted, chief of police, intimidated, Police, question, reporter, town council

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Comments

7 Comments on "Reporter intimidated and booted from town council when asking a question"

Reporter intimidated and booted from town council when asking a question : Federal Jack on Tue, 10th Jul 2012 4:55 am (Edit)

[...] Source: USWGO Alternative News [...]

grandmastershek on Tue, 10th Jul 2012 11:01 am (Edit)



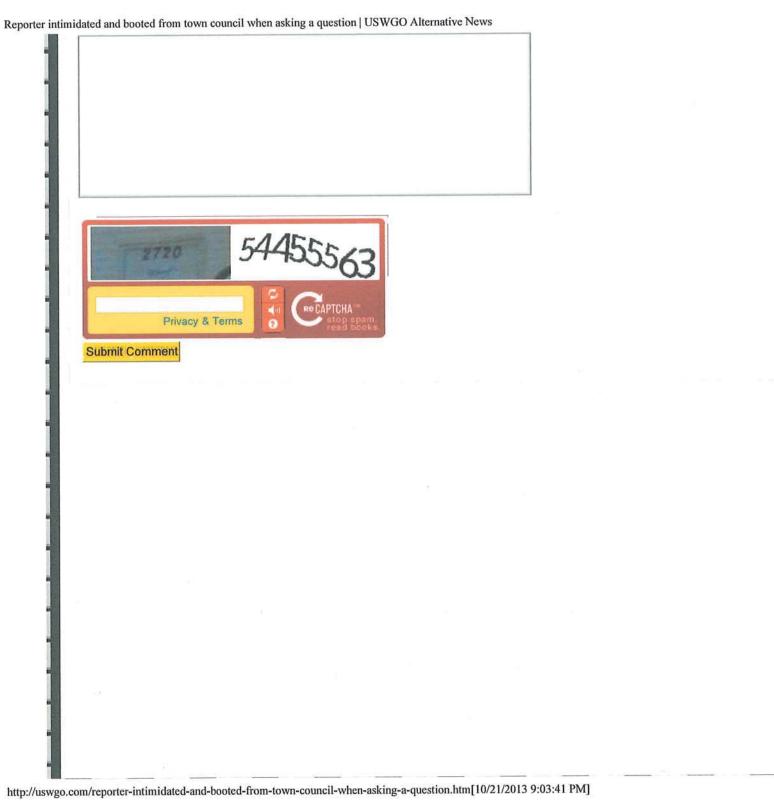
OMG!!! The asked you to leave! The horror! I always love how you guys have cameras but never show happening what you claim happened.

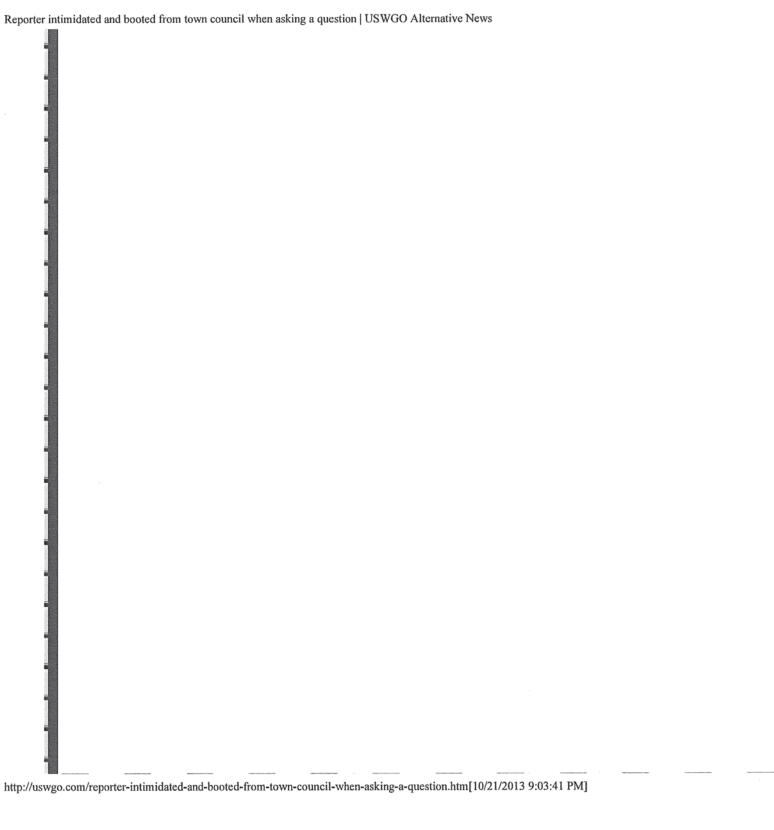
Shit doesn't go your way so you guys cry like the butt hurt conspiracy loons you are. Life sucks...get over it.

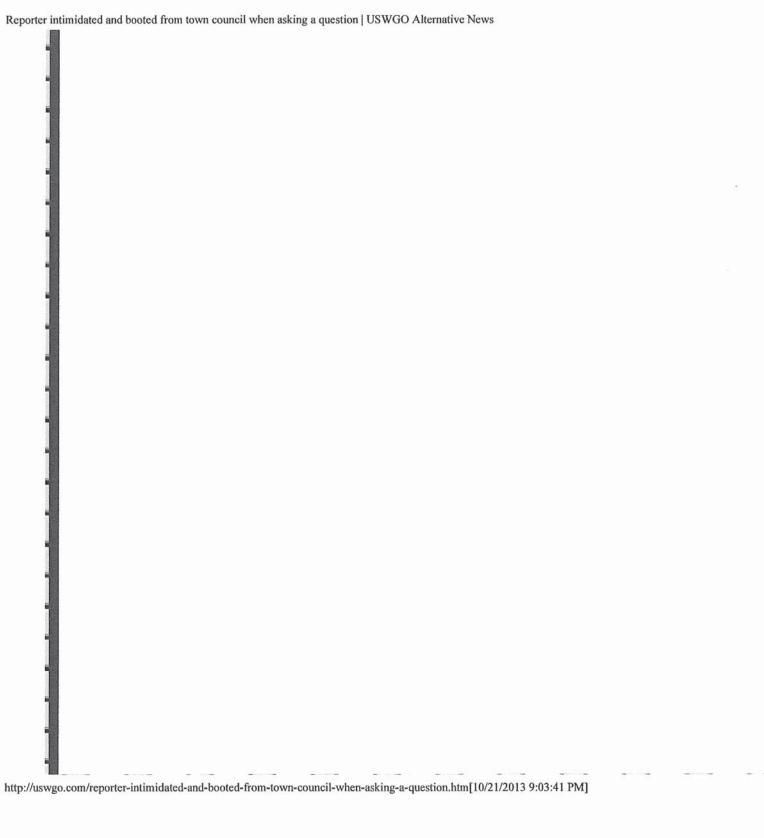
Police Chief Boots Reporter For Asking Senator About NDAA on Wed, 11th Jul 2012 10:47

-	am (Edit)
	[] Source: USWGO []
	Town of Mayodan Corruption is only the beginning of the elites TERROR USWGO Alternative News on Mon, 16th Jul 2012 3:24 am (Edit)
	[] from taking photos and video that would hurt the power of the power broker. That of course was the chief of police of Mayodan and other unknown security and police squads and the staffers at the Senate Office that []
1	Congress looking to outlaw reporters right to report on criminal government corruption USWGO Alternative News on Mon, 16th Jul 2012 4:12 am (Edit)
	[] of the Press on our end has already been threatened at the Mayodan Town Council, where the chief of Police Charles Caruso forced me back and booted me []
	Terravita on Tue, 24th Jul 2012 12:07 pm (Edit)
	I agree with the previous commenter. Why are you reporters feel yourselves hurt when someone ask you to leave before you would get what you want ? get over it
	Your town and city may be a corporation and body politic USWGO Alternative News on Mon, 20th Aug 2012 2:36 pm (Edit)
	[] the Mayodan chief police threatened and intimidated a reporter for asking a state senator a question, I decided to do more research on the Mayodan town []

Speak your mind









Reporter intimidated and booted from town council when asking a question | USWGO Alternative News

| SWGO Hybird Site trial has a mix Alternative in ws/moria, a political action area, a cooming mix forum and more in the future that is will be subject to the subject of the subject to the subject of the subject to the subject of the subject to the sub